

SEMINAR 02

ARC 512

Temple Of Knowledge

By

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Abstract

Temple of Knowledge is a platform for the citizens of this city to interact, to live, to share and to gain knowledge. To gain knowledge, not only through the conventional way that we are already familiar with but also through the ways in which people have enlightened through ages, through sharing. The project tends to juxtapose different factions, to achieve the right combination that fits the 21st century and helps the citizens to be enlightened. The project aims at igniting the thoughtfulness and curiosity of the mind; and an exploring mind asks questions. The project aims to create a shift within the mind of the people and resulting in a change in the society in the larger scale. The ultimate objective of the project is to constantly provide a positive energy into the urban social fabric, so as in not too distant future Dhaka becomes a much more livable, tasteful, and culturally and aesthetically oriented city.

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I am ever grateful to the Almighty Allah for gifting me with an unimaginably beautiful life & this thesis project is the consequence of everything that I learned consciously & unconsciously through this life.

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Chapter 01

Background of the project

1.1 Project Brief

1.2 Motivation

1.3 Thoughts behind the concept

1.4 Rationale of the project

1.5 Aims and Objectives of the project

1.6 Major programs

Background of the project

This project is unique in a sense that there is no existing as such. Also implying there is no given site or program. It is an architectural response to the existing socio-cultural scenario of Dhaka city. The project deals with modifying a particular project so that it can fit into the changing structure of the 21st century. The goal is to engage all sorts of people in a collective space and thus in the process uplift the society through sharing and learning.

1.1 Project brief

Title of the project: Temple of Knowledge

Statement: A facility that juxtaposes ideas and information required to bring about a positive movement within the society. And the best way to approach is through sharing and education

Client: Government

Site location: As there is no proposed project as such there is no specific site for the project as well. But it demanded a central location, well connected to the rest of the city, situated around a variety of functional zones so as to attract and include as much people as possible. Thus the old airport was selected as the site as it is surrounded by other public spaces.

Site area: 39.5 acres

1.2 Motivation

The literacy rate of Bangladesh is very high but it is denoted by the people who can sign their name. So the question to be asked is that “is this true literacy.” Bangladesh is a country full of potentials and possibilities and to take full advantage of this situation the citizens need to have some basic knowledge and understanding. Thus came up with the thought of Temple of Knowledge. A space that tries to address all the citizens to provide basic understanding and knowledge through various means.

1.3 Thoughts behind the concept

Dhaka city, in its present form, happens to lack what we understand to be a prominent recreational space or a space of sharing, the city lacks a common ground, a prominent land area that will serve the community and the city, a place that will help people to grow.

The project set in its place, the old airport which is at the centre of the whole city. The main idea of the project was to set a platform for the citizens of this city to interact, to live, to share and to gain knowledge. To gain knowledge, not only through the conventional way that we are already familiar with but also through the ways in which people have enlightened through ages, through sharing.

1.4 Rationale of the project

Any form of oppression thrives on estrangement, not knowing, preaching belief systems. Their foundation is forged upon social inhibitions, prejudice. On the other hand knowledge is addictive, not to know is sometimes considered bliss. Because asking a single question may lead to a chain reaction of reasoning; reasoning creates opinions. Eventually opinions create conscious individuality.

The project aims at igniting the thoughtfulness and curiosity of the mind; and an exploring mind asks questions. The project aims to create a shift within the mind of the people and resulting in a change in the society in the larger scale.

Consequently the enlightened individuals would unite to build another social structure based on compassion, taste and mutual respect. United then on the grounds of greater identity, this would bring social change.

Throughout history architecture has been used as a means for manipulating or guiding public taste and opinions. And this is one of the major way to provide the society with a thrust to change and be better.

In such a way the ultimate objective of the project is to constantly provide a positive energy into the urban social fabric, so as in not too distant future Dhaka becomes a much more livable, tasteful, and culturally and aesthetically oriented city. This utopian dream cannot be only possible by rapid development of infrastructure, economy or by providing other such commodities, but only by education. And thus it is no harm to target the people who are not educated in the formal academic system. Thus this project aims to educate people in a way that suits each individual.

1.5 Aims and objective of the project

There are three main objectives of this project

- The project aims to combine people from various fields, ages and income group to engage in various discussions, sharing, debates and ideas. It should be always kept on mind that knowledge has no boundaries and there is always something new to learn and each individual has the something to teach others.
- The project should be inviting enough to attract people. And the project should be able to blend into the lifestyle of the people.
- Lastly the project should add a new dimension in the context of the city. The project should act as a guideline or path that drives the society forward.

1.6 Major Programs

Civic spaces

Indoor exhibition space

Multipurpose Space

Outdoor exhibition space

Food court (indoor)

Food court (outdoor)

Book market

Gaming zone

Observatory

Educational spaces

Lobby including gallery, newspaper area

Back office and technical area

Common reading space

Group reading space

Self reading space

Multimedia zone

Seminar, Class rooms

Exhibition Space

Food court

Gallery

Archive

Other spaces

Parking

Circulation

Amphitheatre

Public and private wash rooms

Store

Information centers

Kiosks for various displays

Comment and graffiti walls

Sculpture displays

Chapter 02

Site Appraisal

2.1 Site location

2.2 Analyzing the site

2.3 Site and surroundings, photographs, environmental considerations, detail area plan and land use pattern

2.3 SWOT Analysis

2.4 Conclusion

Site Appraisal

As there is no allocated site for the project, a number of potential sites were initially chosen that complies with the conditions required for such project.

2.1 Site location

The site to be chosen had to be very strategic. The site had to attract as much people as possible. As a result the site that was taken is located right at the centre of the city. The site required a location that does not belong to any specific residential neighborhood but had surrounded by mixed use development and public spaces to different scales.

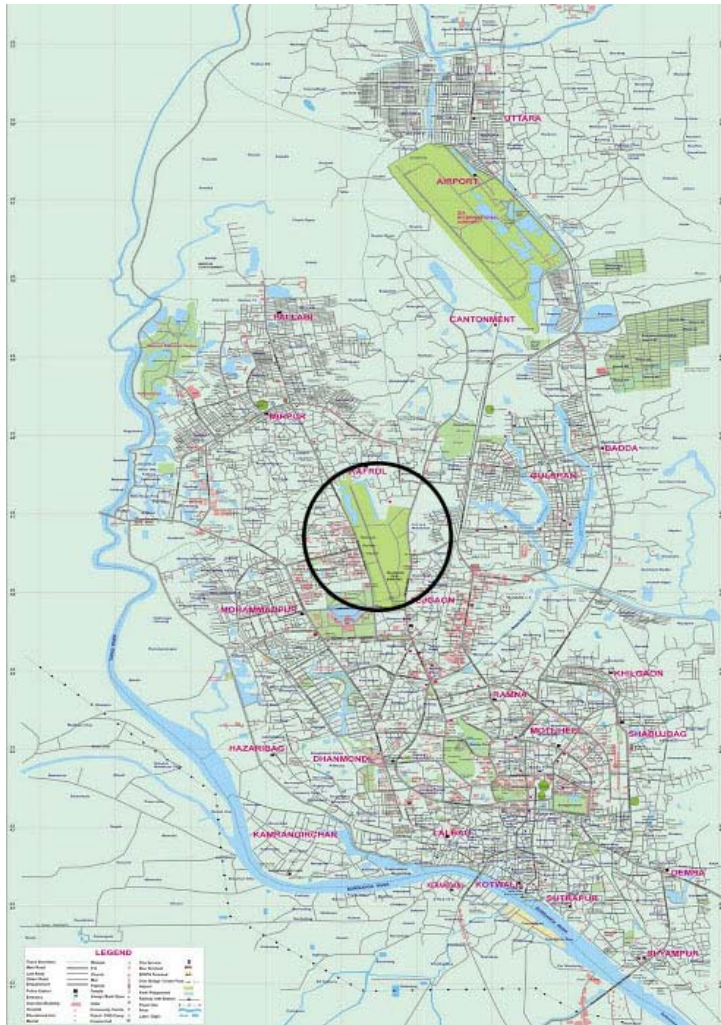


Fig 2.1: Site location. Source: Modified by author from Google (Jan, 2014)

The site is the old airport. The site was just perfect for the project as it is at the centre of the city and also the site is surrounded by major civic spaces.



Fig 2.2: Surrounding civic spaces. Source: modified by author from Google earth (Nov, 2014)

The exact site chosen is the southern most part of the old airport. The reason for taking this part is that it is surrounded by major roads, busy nodes and most importantly it is surrounded by major civic spaces. The civic spaces that surround the site are as follows:

Novo theatre, Army Museum, National Assembly, Zia Uddan, Bangabandhu International Conference Centre and the Trade Fare ground.

2.2 Analyzing the site



Fig 2.3 solid void ratio



Fig 2.4 existing green



Fig 2.5 existing waterbodies

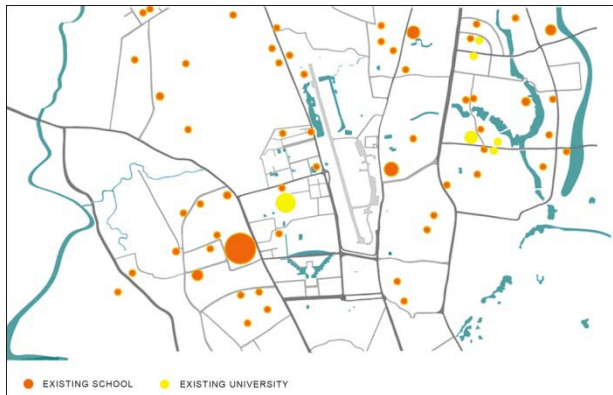


Fig 2.6 existing institutions



Fig 2.7 existing civic spaces



Fig 2.8 existing green civic spaces



Fig 2.9 existing shops and markets



Fig 2.10 Existing Playgrounds

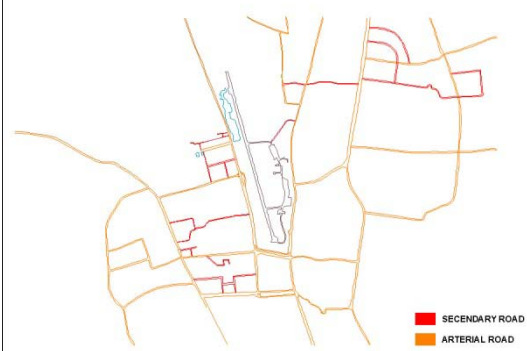


Fig 2.11 Existing road network



Fig 2.12 rickshaw network



Fig 2.13 Pedestrian network

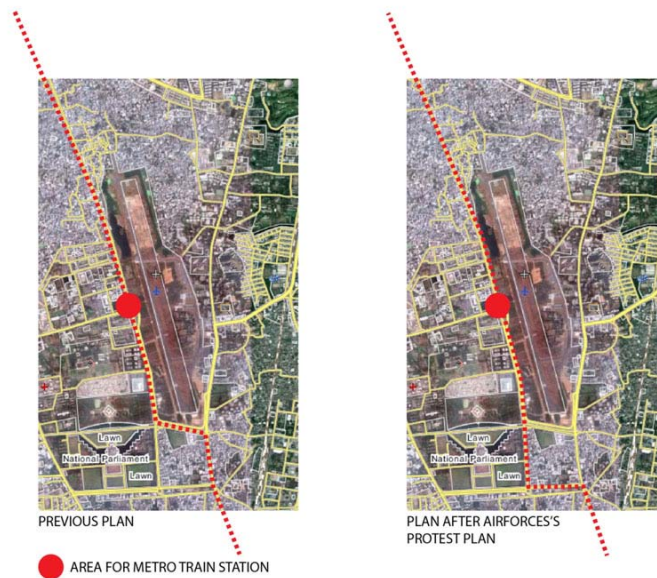


Fig 2.14 Metro Station

2.3 Site and surroundings, photographs, environmental considerations, detail area plan and land use pattern

2.3.1 Site Surroundings



Fig 2.15: site surroundings. Source: Author (Nov, 2014)

The site is surrounded by places like Agargoan, Shymoli, Sher-e- Bangla Nagor, farmgate and Tejgon.

Agargoan and Shymoli is mostly a mixed use area with few governmental quarters. The place is densed with very few coverage of green space. The traffic condition is a major problem during pick hours. Mainly middle income people reside here. The place consists of many administrative offices. The area has no community or gathering spaces. The lack of green, water bodies and open spaces make the area a densed concrete jungle. The mixed use is not integrated with the residential zones. The place is very vibrant and active during the day and dies out by 5 pm.

The Sher-e- bangle Nagor is designed by Louis I. Kahn. It is a busy commercial and central neighborhood. It is home to many offices of government and public institutes. It also consists of many educational institutes, banks and financial institutes and shops. It is the home of the National Assembly, the area is very restricted. The area is vibrant during the day and dies out at night. The place contains lots of green spaces and waterbodies but maximum of it is restricted for security issues. The place holds civic activities along the road but due to the restrictions most of the activities are limited.

Farmgate is one of the busiest places in Dhaka city. It is the commercial and transportation hub of the city. The area also has residential facilities but it is very few in number. The majority of inhabitants in this area are serviceman and businessman. As this place is a major transport hub traffic is always and issue day and night. This place remains active almost 24 hours. This is a very crowded zone with no open and public gathering spaces. The zone consists of very little green and water spaces.

Predominantly industrial, the entire Tejgaon region is now growing into the extended Central Business District. Most major arteries of the city connect or pass through this region. The upcoming infrastructure projects of the city also integrate with the region. This area brings in a lot of people from different socio-economic brackets from all over the city every day for various reasons. In terms of community and locality, the region belongs to the whole city rather than to any particular neighborhood. The place also consists of educational institutes, parks and lakes.

Tejgaon also has a restricted zone. Its holds the Air force Head quarters, Prime Ministers office and government administrative head quarters.

2.3.2 Site photographs





Fig 2.16: site images. Source: author (Sept, 2014)

2.3.3 Environmental considerations

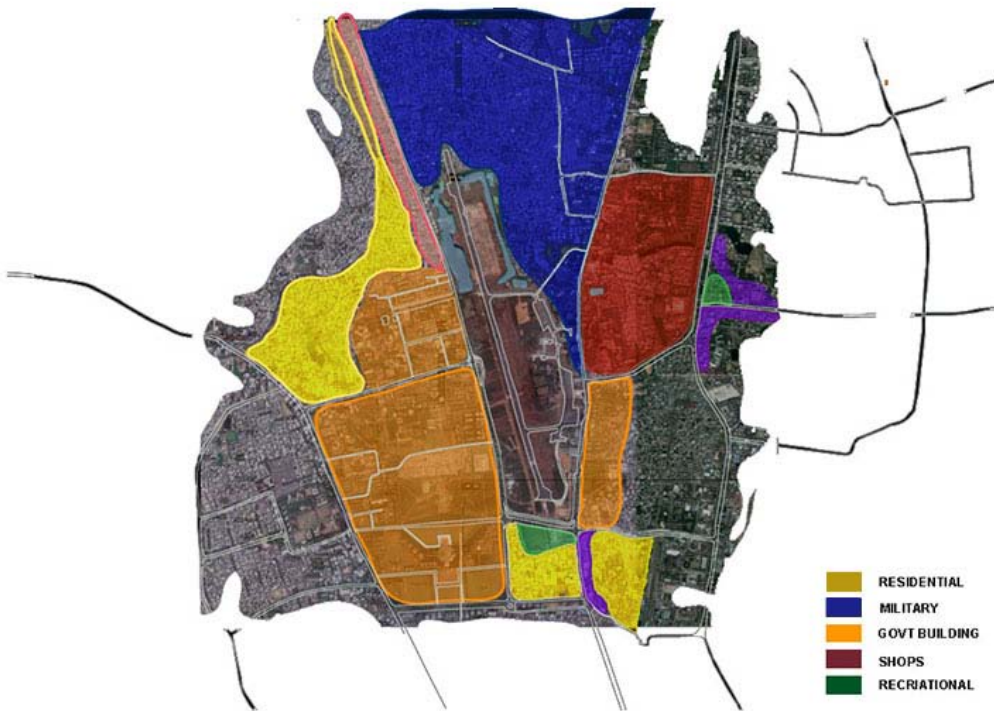
In many research studies the Tejgaon and farmgate area is significantly mentioned as the most polluted area of Dhaka city in terms of sound, air and soil pollution. Tejgaon as it is a industrial area and Farmgate as it is a transport hub. But the gradual development of the city is making this Tejgaon a mix of commercial and industrial use. Many industries are being moved from this area to the out skirts of Dhaka city for reducing the environmental damage caused by them.

As a fabric of mixed use contents, the temperature of Tejgaon is slightly different from the rest of the Dhaka. The air is more carbonated and hotter. On the other hand Shere Bangla Nagor is relatively better as its has a lot more green, water and open space. As the site is located in the transition between these two different environments its is always a challenge to flow the positive environment and defeat the negative one.

2.3.4 Detail area plan and land use pattern

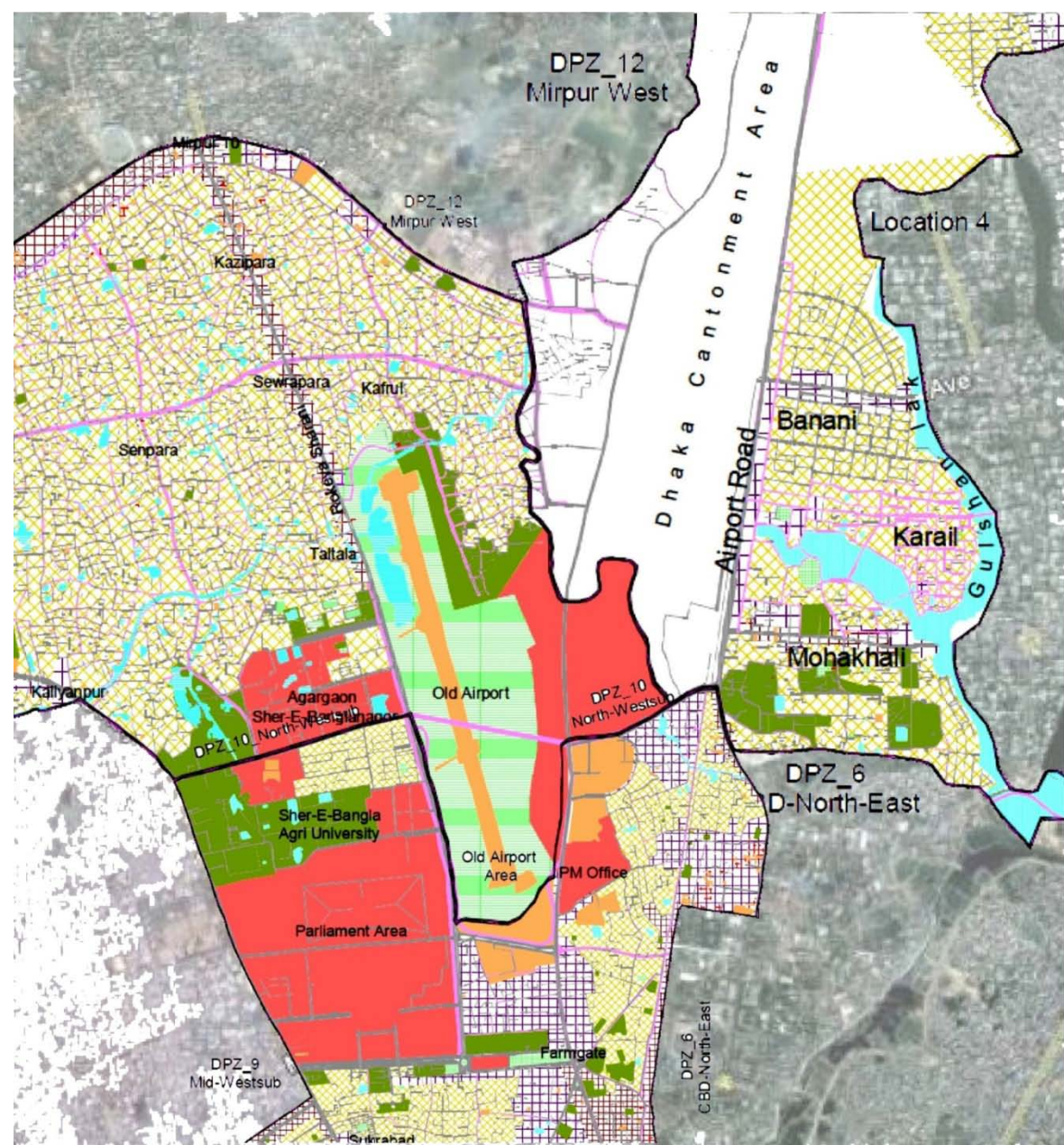
Fig 2.17: Surrounding zoning.

Source: modified by author from Google earth (Nov, 2014)



The surrounding urban fabric shows variety and, interrelated and integrated development. The different zones have very distinct flavor of built environment, locality and community. The site also creates very interesting relationships with other public and urban spaces.

The site is surrounded by residential areas, military areas, government buildings, shops and recreational areas as shown in the figure above. There are surrounding water bodies and green around the site. Both the green and water has a restricted zone as well as a public zone.



DMDP Proposal



Fig 2.18 land use pattern, source: Wikipedia

2.4 SWOT ANALYSIS

Strengths

- Mobility
 - Wide roads on all sides of the site
 - Footpaths along the roads
- Landuse
 - Number of universities and schools
 - Number of markets
- Important Landmarks around the site
- Environmental
 - Large amount of green
 - Presence of water bodies
 - Open space

Weakness

- Mobility
 - Illegal car parking
 - The road is divided into three parts
 - No proper bus stops
 - Rickshaw banned
- Landuse
 - Some areas are restricted
- Environmental
 - Restricted green
 - Restricted water bodies
 - Restricted open space

Opportunities

- Mobility
 - Reduce surrounding traffic
 - Footpaths extend to form plaza
 - Encourage pedestrian activities

- Landuse
 - Connect all civic spaces
 - Space for vendors
 - Maximize** the utilization of the area by proper planning and creating public spaces.
 - Incorporate** the green spaces and create large open spaces, parks, gardens, landscaped plaza, etc.
- Environmental
 - Preserve eco system, home of other animals, birds.
 - Plantation can make the air clean

Threats

- Mobility
 - Rapid development of infrastructure can lead to unplanned growth
 - Increase in land value.
- Land use
 - Unplanned settlement, unfavorable growth, encroachments
- Environmental
 - Unplanned development can create adverse environmental impacts

2.5 Conclusion

The chapter well establishes the potentials of the chosen site and its analysis in context of the idea in question. The site already exhibits a huge number of people gathered for recreation and relief; so with infrastructure and other surrounding development the project can create a huge impact on the city, considering this as its site. The following chapters would elaborate how the site is addressed in the design consideration.

Chapter 03

Literature review

3.1 Introduction

3.2 Theoretical Background

3.3 Influence of technology over societies

3.4 Historical background of multidisciplinary groups & accumulation of knowledge

3.5 Contemporary examples of uniting all knowledge

3.6 Features enhancing participation

3.7 Types of alternate education

3.8 Learning styles

3.9 Library as a second home

3.10 Conclusion

3.1 Introduction

The project required a wide range of conceptual rationalization, which actually formulated and helped develop the basics of the functionalities. This chapter deals with those aspects of the project which reinforces the thought process behind the practical development of such a project. This chapter is very important in this sense that it collaborates between the concept and its transformation into establishing rational domains of physical development.

3.2 Theoretical background

The project aims at becoming an instrument of social change in a very versatile or multi-dimensional way. It creates opportunities of personal or individual growth and betterment by enhancing knowledge and creativity by generating motivation and inspiration, scopes for higher aspirations. These individuals directly influenced by the facility and probably involved with its fundamental functions. Then again these individuals will singularly or collectively influence many others to participate in the chain reaction of a process that would create greater consciousness and awareness, motivate people in general towards greater good. It would create an environment of positive energy and boost the public taste, sentiments and opinions in a better, democratic and patriotic direction. The temple of knowledge is a place that tries to bring about the right chemistry of people and create a higher state of mind. And the facility aims to do it in such a manner as the process becomes quite evident and obvious and a natural course of action. This would in turn create similar opportunities of various scale and type throughout the city and eventually the country. The temple of knowledge can be said as the right kind of spark required to create such chain of reactions that would eventually bring about a massive change in our social, economic and political scenario.

3.2.1 The domino effect

The domino effect is a chain reaction that occurs when a small change causes a similar change nearby, which then will cause another similar change, and so on in linear sequence. The term is best known as a mechanical effect, and is used as an analogy to a falling row of dominoes. It typically refers to a linked sequence of events where the time between successive events is relatively small. It can be used literally (an observed series of actual collisions) or metaphorically (causal linkages within systems such as global finance or politics).



Fig. 3.1: Concept image. Source: ManaNeyestani, Iran

The domino effect is a linear system and its relevance in creating a chain reaction is quite apparent. Incidentally the term was first used by an US president talking about how fall of one particular important political power would create a chain of falls in the surrounding nations. (Source: Wikipedia)

3.2.2 The ripple effect

The ripple effect is a term used to describe a situation where, like the ever expanding ripples across water when an object is dropped into it, an effect from an initial state can be followed outwards incrementally. The ripple effect is a term used to describe a situation where, like the ever expanding ripples across water when an object is dropped into it, an effect from an initial state can be followed outwards incrementally.

Examples can be found in economics where an individual's reduction in spending reduces the incomes of others and their ability to spend. In sociology, it can be observed how social interactions can affect situations not directly related to the initial interaction, and in charitable activities where information can be disseminated and passed from community to community to broaden its impact. (Source: Wikipedia)

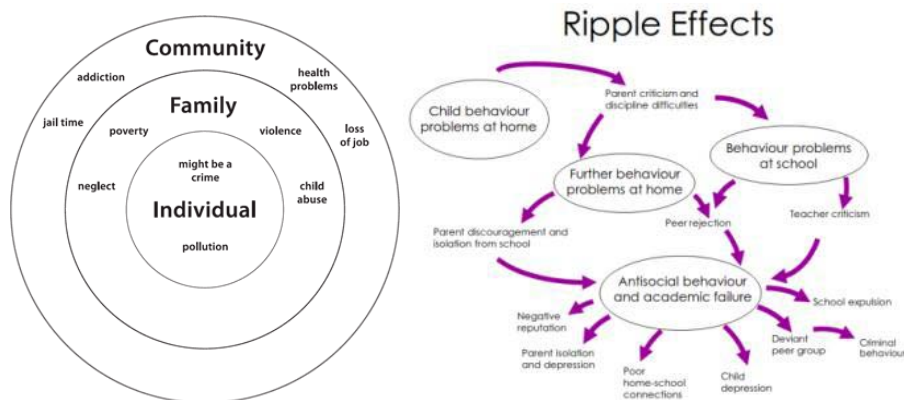


Fig 3.2: ripple effect, Source: wikipedia

It is the new paradigm of “virtual organizations” forming on the web without organization that is usual to traditional business mindsets. The organization of relationships created from communications that reflect shared values and vision becomes the new organization without authority in the traditional sense. (Source: Wikipedia)

3.2.3 Distancing Effect

The distancing effect is a performing arts concept coined by playwright Bertolt Brecht "which prevents the audience from losing itself passively and completely in the character created by the actor, and which consequently leads the audience to be a consciously critical observer .“

The distancing effect is achieved by the way the "artist never acts as if there were a fourth wall besides the three surrounding him. The audience can no longer have the illusion of being the unseen spectator at an event which is really taking place." The use of direct audience-address is one way of disrupting stage illusion and generating the distancing effect. In performance, as the performer observes himself, his objective is to appear strange and even surprising to the audience. He achieves this by looking strangely at himself and his work.

By disclosing and making obvious the manipulative contrivances and "fictive" qualities of the medium, the viewer is alienated from any passive acceptance and enjoyment of the play as mere "entertainment." Instead, the viewer is forced into a critical, analytical frame of mind that serves to disabuse him of the notion that what he is watching is necessarily an inviolable, self-contained narrative. This effect of making the familiar strange serves a didactic function insofar as it teaches the viewer not to take the style and content for granted, since the medium itself is highly constructed and contingent upon many cultural and economic conditions. (Source: Wikipedia)

3.3 Influence of technology over societies

Technology is very important in our everyday life. It has become an inseparable part of our lives. Every day we connect and experience the world in ways never imagined even a few decades ago, thanks to the blessings of modern technology. It is quite apparent the effects and influences of technology over human beings and even in some case other species. Good or bad technology is the most significant and powerful catalyst driving our lives. From computers, cell phones and microchips to mega industries, satellite stations to supercars, warheads to home Appliances technology rule our everyday lives. It becomes more evident when we consider that all developed nations are highly developed with their technology and as well the technology usage. The affairs of technology has a very strong appeal to people; trying to keep up with the rapid rate of technological innovations, people generally tend to be very interested in learning

technological news and updates, about gadgets to distant planets to a new medicine out of a tree or some complex research on the configuration of molecules, everything in general related to science and technology appeals to people. More over technological innovations very directly affect people's lives, thoughts and opinions to be more liberal, open minded and patient to others. It connects people to information and other people, lets them communicate and interact in an instance. Moreover no other area can match the amount of research and innovations happening in the fields of technology.

3.4 Historical background of multidisciplinary groups & accumulation of knowledge

3.4.1 La Convivencia

La Convivencia ("the Coexistence") is a term used to describe a postulated situation in Spanish history from the Muslim Umayyad conquest of Hispania in 711 to 1492 – concurrent with the Reconquista ("Reconquest") – when Jews, Muslims, and Catholics in Spain lived in relative peace together within the different kingdoms (during the same time, however, the Christian reclaiming of land conquered by the Moors was ongoing). The phrase often refers to the interplay of cultural ideas between the three groups, and ideas of religious tolerance. It played an important role in bringing the classics of Greek philosophy to Europe, with translations from Greek to Arabic to Hebrew and Latin.

3.4.2 Navaratna

Navaratnas or Nauratan (Sanskrit dvigunava-ratna- "nine gems") was a term applied to a group of nine extraordinary people in a emperor's court in India. Some well-known groups are in the RaajSabha (court) of King Janaka, Emperor Vikramaditya and in Emperor Akbar's darbar.

The Mughal ruler Akbar, despite his illiteracy, was a great lover of the artists and intellectuals. His passion for knowledge and interest in learning from great minds led him to attract men of genius to his court, known as the nine courtiers of Emperor Akbar or Navratnas.

3.4.3 Similar Groups

Many famous emperors in India had courtiers labeled in similar ways. For example, the valuable members of the court of Krishna Deva Raya were termed Astadiggajas, the eight elephants. LakshmanSen the ruler of the Sena Empire had Pancharatnas (meaning 5 gems) in his court; one of whom is believed to be Jayadeva, the famous Sanskrit poet and author of Gita Govinda.

3.5 Contemporary examples of uniting all knowledge

Since the invention of the internet, sharing information is becoming easier everyday & every gadget, software or electronic devices we use are getting interconnected. Accessing & gathering knowledge or information is easier than ever and becoming adapted to the highly complex interconnectivity of different fields of knowledge by becoming highly sophisticated systems with the simplest interfaces.

3.5.1 Google

Google started with a simple internet search engine but has become, due to the need of time, associated with almost every possible aspects of information technology. Google has merged with Youtube, the most popular video sharing website and its database is now even stronger. Association & quick sharing system among products such as – Blogger, Google books, Google Chrome, Google Earth, Google Sketchup, Google Maps, Picasa, Google Docs, Gmail, Orkut, Android, Google Translator, Google AdWords, Google Apps, 3D Warehouse etc. has led to a spontaneous information gathering & sharing system which could sustain longer than any other attempts in history.

3.5.2 Wikipedia

Wikipedia is a free, web-based, collaborative, multilingual encyclopedia project supported by the non-profit Wikimedia Foundation. Its 18 million articles (over 3.6 million in English) have been written collaboratively by volunteers around the world, and almost all of its articles can be edited by anyone with access to the site. Wikipedia was launched in 2001 by Jimmy Wales and Larry Sanger and has become the largest and most popular general reference work on the Internet, ranking around seventh among all websites on Alexa and having 365 million readers.

3.5.3 Social Networks

Social networks such as Facebook, My Space, and Twitter are playing a major role in sharing information at a mass level. Through spontaneous growth of connections among the users it becomes a complex network of human being & organization which virtually covers almost every aspect of life.

3.5.4 TED

TED (Technology Entertainment and Design) is a global set of conferences owned by the private non-profit Sapling Foundation, formed to disseminate "ideas worth spreading." Since

June 2006, the talks have been offered for free viewing online, under a Creative Commons license, through TED.com. As of July 2010, over 700 talks are available free online. By January 2009 they had been viewed 50 million times. In July 2010, the viewing figure stood at more than 290 million, reflecting a still growing global audience.

3.6 Features enhancing participation

There are many ways and types of demonstrations in all kinds of arts; but some of them are very public oriented or interactive. For the project it is very important to manipulate such interactions to a higher level so as to make the project more influential to the people.

3.6.1 Thrust Theater

In theater, a thrust stage (also known as a platform stage or open stage) is one that extends into the audience on three sides and is connected to the backstage area by its upstage end. A thrust has the advantage of greater intimacy between audience and performer than a proscenium, while retaining the utility of a backstage area. Entrances onto a thrust are most readily made from backstage, although some theatres provide for performers to enter through the audience using vomitory entrances. An arena, exposed on all sides to the audience, is without a backstage and relies entirely on entrances in the auditorium or from under the stage.

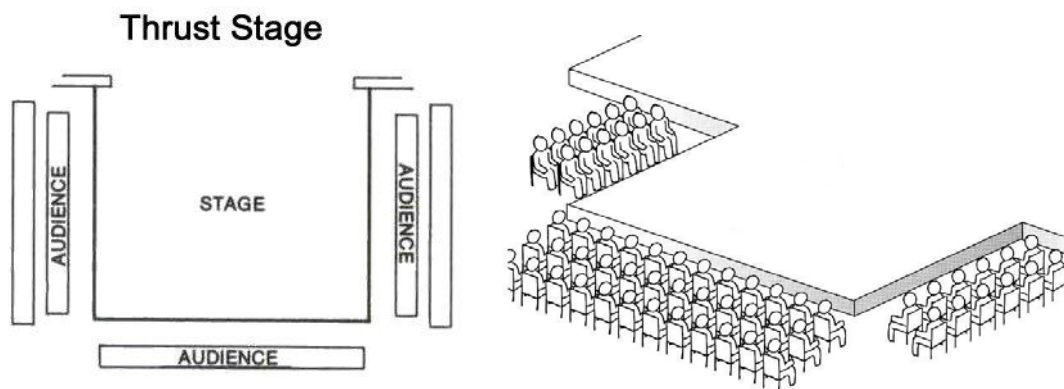


Fig 3.3 Thrust Stage, Source: Wikipedia

As with an arena, the audience in a thrust stage theatre may view the stage from three or more sides. If a performance employs the fourth wall, that imaginary wall must be maintained on multiple sides. Because the audience can view the performance from a variety of perspectives, it is usual for the blocking, props and scenery to receive thorough consideration to ensure that no perspective is blocked from view. A high backed chair, for instance, when placed stage right, could create a blind spot in the stage left action.

3.6.2 Open studios/ gallery space

Open studios or galleries offer opportunities for the audience to see the process behind the artworks as well; or in other words the creative process becomes the exhibit. On one hand these studios are open to all who are interested to use with minimal legislations and on the other hand the studio itself is an exhibition space for visitors to come and see the work in progress. These allow more interaction with artists and art in different ways.

3.6.3 Circulation pattern of colonial or traditional buildings

The traditional buildings around a courtyard have a very interesting circulation pattern. While almost all the spaces are accessible from the courtyard there is another circulation through these spaces that connect them internally. So to reach one space one has to go through a number of other spaces.

3.6.4 Art plaza, sculpture court, open performance spaces i.e. amphitheater

Art plaza, sculpture courts and open performance spaces are capable of bringing people close to artwork and artists. These spaces can be very versatile and multi-functional. In such places people get to interact more with art in various ways. Different sort of smaller or large scale exhibitions, participation and experimentation are possible here. And as these are not indoor or institutionalized spaces, they offer more opportunities for spontaneity and public involvement. These spaces are flexible to be used for varying purposes according to different event and occasions. So these spaces have very different kind of attractions or invitations to people to come and participate or observe.

3.7 Types of alternate education

In

educational literature, the study of alternative education systems often mentions “open systems”, “non-formal education”, “distance learning”, “non-conventional studies”, among other terms. In some cases these are employed as synonyms, whereas in others, there is no agreement as to their meanings, making it impossible to reach a consensus for their concepts. A more precise definition of such concepts is fundamental, as is their possible classification, aimed at better understanding and practical utilization. We shall therefore analyze the concepts of formal, non-formal and informal education, in an attempt to define their features, advantages, limitations and inter-relations.

3.7.1 Formal Education

It corresponds to a systematic, organized education model, structured and administered according to a given set of laws and norms, presenting a rather rigid curriculum as regards objectives, content and methodology. It is characterized by a contiguous education process named, as Sarraonaremarks, “presential education”, which necessarily involves the teacher, the students and the institution. It corresponds to the education process normally adopted by our schools and universities. Formal education institutions are administratively, physically and curricularly organized and require from students a minimum classroom attendance. There is a program that teachers and students alike must observe, involving intermediate and final assessments in order to advance students to the next learning stage. It confers degrees and diplomas pursuant to a quite strict set of regulations.

3.7.2 Non Formal Education

As seen above, formal education has a well-defined set of features. Whenever one or more of these is absent, we may safely state that the educational process has acquired non-formal features. Therefore, if a given education system is not presential most of the time - non-contiguous communication - we may say that it has non-formal education features. Likewise, non-formal education characteristics are found when the adopted strategy does not require student attendance, decreasing the contacts between teacher and student and most activities take place outside the institution - as for instance, home reading and paperwork. Educative processes endowed with flexible curricula and methodology, capable of adapting to the needs and interests of students, for which time is not a pre-established factor but is contingent upon the student's work pace, certainly do not correspond to those comprised by formal education, but fit into the so-called non-formal education.

3.7.3 Informal Education

Informal education is quite diverse from formal education and, particularly, from non-formal education, although in certain cases it is capable of maintaining a close relationship with both. It does not correspond to an organized and systematic view of education; informal education does not necessarily include the objectives and subjects usually encompassed by the traditional curricula. It is aimed at students as much as at the public at large and imposes no obligations whatever their nature. There generally being no control over the performed activities, informal education does not of necessity regard the providing of degrees or diplomas; it merely

supplements both formal and non-formal education. Informal education for instance comprises the following activities: (a) visits to museums or to scientific and other fairs and exhibits, etc.; (b) listening to radio broadcasting or watching TV programmes on educational or scientific themes; (c) reading texts on sciences, education, technology, etc. in journals and magazines; (d) participating in scientific contests, etc.; (e) attending lectures and conferences.

3.8 Learning Styles

Kolb defines four kinds of learning styles based on four learning modes:

The concrete experience mode is characteristic of people who feel more than they think - learning from feelings

The reflective observation mode is characteristic of people who would rather watch and observe others than be active participants- learning from watching and listening

The abstract conceptualization mode is characteristic of people who think more than they feel, and analyze problems by some systematic method- learning by thinking

The active experimentation mode is characteristic of individuals who welcome practical applications rather than reflective understanding as well as actively participating rather than observing - learning by doing

3.9 Library as a second home

The relationship between the library and the home is changing, as more library catalogues go online, enabling people to order, reserve or renew library stock, and even belong to electronic newsgroups established by libraries for particular educational or cultural interest groups. As a result the library is being de-institutionalized, and becoming more like a club or leisure centre. As has already been noted, in Sweden they talk of the public library as being 'the living room in the city' or even 'the town salon'. Interior design and furnishing can help create a more domestic, club-like sense of membership and belonging: a home from home.

3.10 Conclusion

As the project is not a proposed one or one of which the program or functionalities and their inter-relations could be developed quite easily, this chapter would create a solid framework for such requirements of the project. From these studies it can be derived that the **Temple of Knowledge** intends to combine the past and the present together into an appropriate chemistry. Public involvement or participation is rather important here. The whole process that is at work has to become an exhibit to the city; so that this creative exhibit can inspire the people of the city and they are encouraged and intrigued to participate.

Chapter 04

Case Studies

4.1 Introduction

4.2 Cases

4.1 Introduction

As there are no exactly similar projects like this, therefore in this chapter different aspects of the project would be briefly analyzed with a number of various local and international projects.

4.2 Cases

4.2.1 National assembly building, Dhaka

JatiyoSangsadBhaban is the National Assembly Building of Bangladesh, located in the capital Dhaka. It was created by architect Louis Kahn and is one of the largest legislative complexes in the world. It houses all parliamentary activities of Bangladesh. Kahn's key design philosophy optimizes the use of space while representing Bangladeshi heritage and culture. External lines are deeply recessed by porticoes with huge openings of regular geometric shapes on their exterior, shaping the building's overall visual impact.

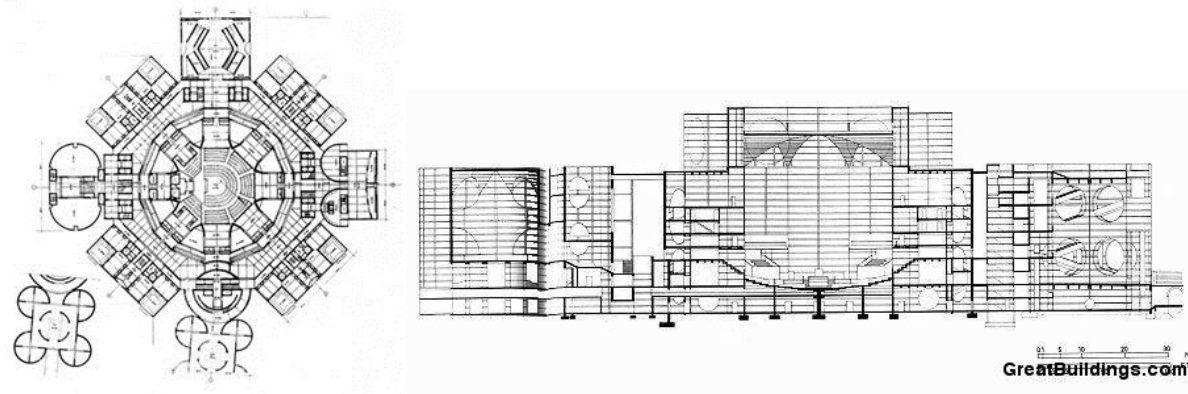


Fig 4.1: Plan and Section, Source: greatbuildings.com

Architects: Louis I. Kahn, Philadelphia, U.S.A., with David Wisdom and Associates (after 1979), Philadelphia, U.S.A

Location: Dhaka, Bangladesh

Duration: 1962- 1983

Structural system: Concrete

In architect Louis Kahn's own words:

"In the assembly I have introduced a light-giving element to the interior of the plan. If you see a series of columns you can say that the choice of columns is a choice in light. The columns as solids frame the spaces of light. Now think of it just in reverse and think that the columns are hollow and much bigger and that their walls can themselves give light, then the voids are rooms,

and the column is the maker of light and can take on complex shapes and be the supporter of spaces and give light to spaces. I am working to develop the element to such an extent that it becomes a poetic entity which has its own beauty outside of its place in the composition. In this way it becomes analogous to the solid column I mentioned above as a giver of light. It was not belief, not design, not pattern, but the essence from which an institution could emerge..."

The lake on three sides of the Bhaban, extending up to the Members' hostel adds to site's aesthetics and also portrays the riverine beauty of Bangladesh. The assembly building received the Aga Khan Award for Architecture in 1989.

Analysis

The national assembly building, Dhaka has a very open invitation to the people, architecturally. It has given form an idea of freedom and democracy. The plaza and the huge open spaces create opportunities of mass gathering and different activities and interaction. The interior spaces are transformation of the interactive space found in traditional spaces. The quality of light and serendipity is remarkable. It creates a positive energy and persuades to think and be creative.



Fig 4.2: Perspective View

4.2.2 The Jean-Marie Tjibou Cultural center

The cultural center is situated on a narrow strip of land surrounded by the ocean and lots of lush vegetation. Ten pavilions of various sizes ranging in height between 9 and 24 meters high are situated asymmetrically along a main path. Each pavilion serves a various function or evokes certain themes and includes permanent or temporary exhibitions. Some contain studios for traditional activities, such as music, dance, painting and sculpture. Also housed at the center is an auditorium, an amphitheater, the administrative departments, research areas, a conference room and a library.

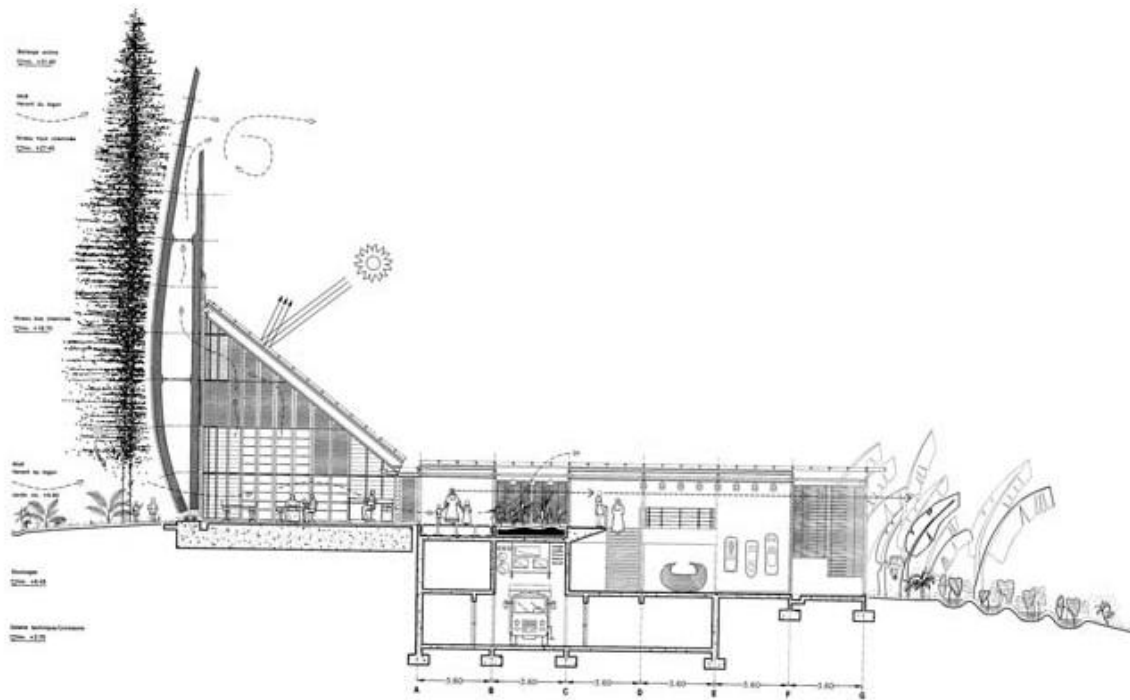


Fig 4.3: Plan, Source: Archdaily.com

Architect: Renzo Piano

Location: New Caledonia, Spain

Opened for public: 1998

Structural System: Bamboo

The pavilions themselves were inspired by traditional Kanak huts, but were not copied exactly – they're more of a modern take on the traditional architecture. Built from iroko wood as well as glass, steel, and bamboo, they respect traditional construction methods according to the most sophisticated engineering studies. Operable roof skylights and a screen of laminated wood

facilitate natural ventilation using the wind to push hot air out of the top, while a bamboo wall filters light into the interior.

Analysis

The cultural center offer an amazing solution corresponding the site and heritage. The scale and various detail, use of materials, and different spaces are noteworthy. The place is very successful and vibrant due to its broader public inter activeness.

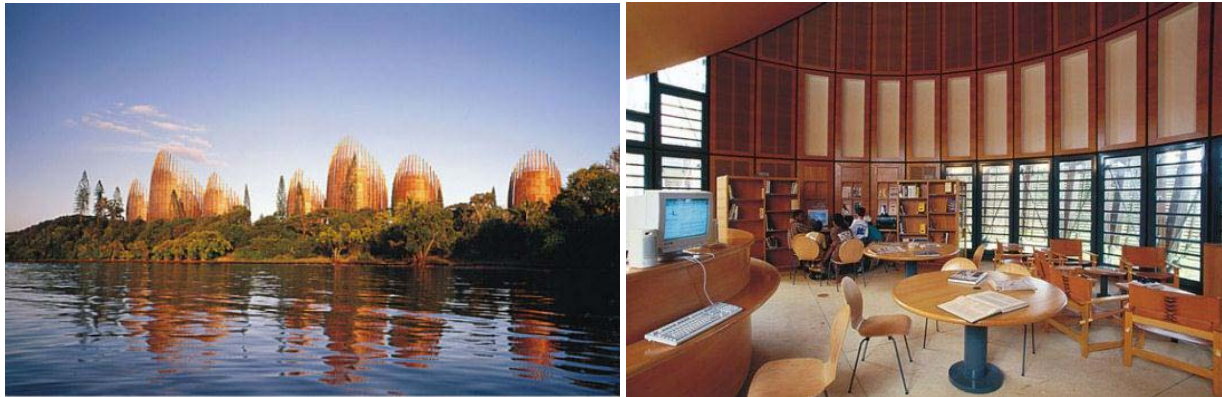


Fig 4.4: Perspectives, Source: Arch daily

4.2.3 Fine Arts Institute, Dhaka University

Faculty of Fine Art (FFA) was an Institute of Dhaka University. The Institute turned into Faculty in 2008. This educational institute which established in 1948 was the first art educational Institute in this region and became the main center of art and cultural practice. Its currently situated in Shahbagh, in Dhaka city, close to the National Museum. Architect Muzharul Islam designed the institute.

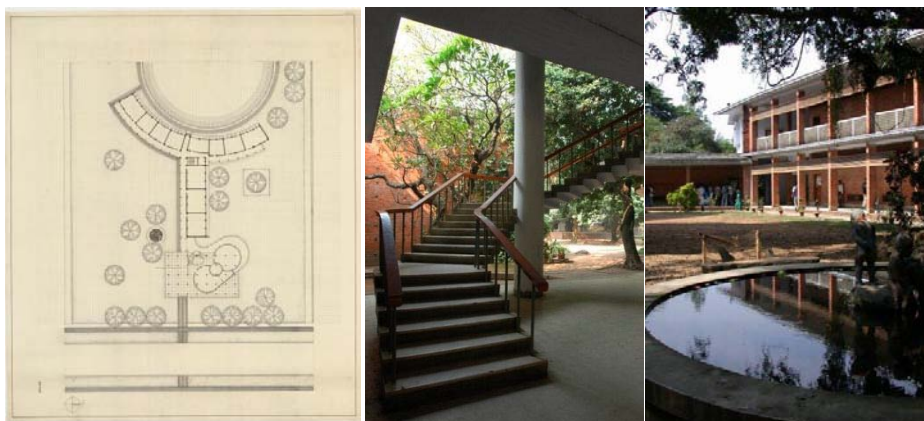


Fig 4.5: perspective

Architect: Muzharul Islam

Location: Shahbagh, Dhaka, Bangladesh

Duration: 1953 - 1955

Structural system: Masonry

This masterpiece was Muzharul Islam's first architectural endeavor. The site is located in the roman area apart of Dhaka University Campus. The Roman area is well known for it's gardens and parks. Most of the buildings in this area have been designed in the scheme of a "baganbari" (house in a garden). The site that was given for the purpose of the institute was dotted with beautiful trees with a large circular depression at the end of the site. Muzharul Islam decided to come up with a design scheme that will retain all the trees on the site (as some of them were large beautiful trees that would have require many years to grow). His scheme was also climate responsive and had large continuous verandahs shading the inner walls and windows of the classrooms and studios. The design echoes the outhouse and inner house scheme of rural Bangladesh. It also transforms 'Jalees' (lattices) and 'beras' (perforated screens) into wonderful screens that separates and creates thresholds. One enters into the front pavilion, a wonderful structure that houses galleries on the ground floor and teachers and common rooms etc. on the first. A wonderful sculptural stairs connects the two levels around a wonderful internal courtyard. Source: Wikipedia

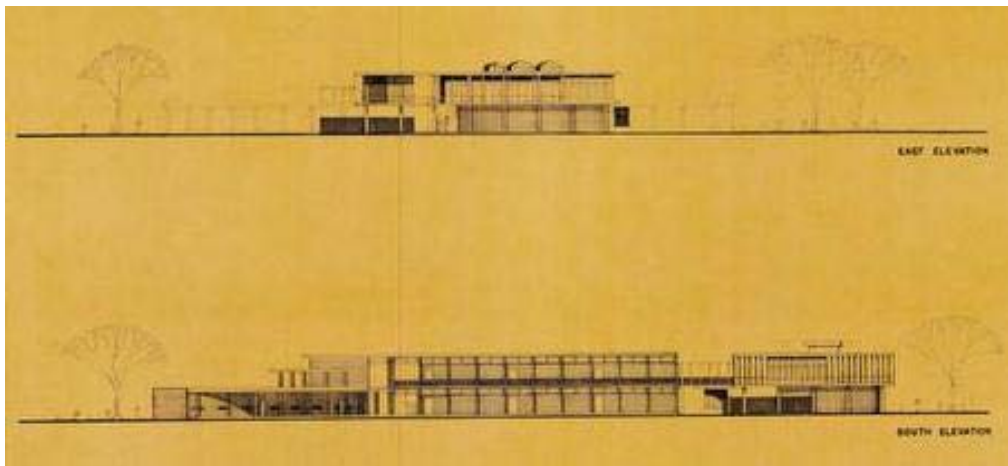


fig4.6: elevation

Analysis

The fine arts institute, Dhaka offers a variety of spaces. These spaces in forms of courtyards, pocket spaces generate a lot of activities and interaction around them. The use of screen is also very interesting along with the private – public relationship.

4.2.4 Seattle Central Library

The Seattle Public Library's **Central Library** is the flagship library of The Seattle Public Library system. The 11-story (185 feet or 56 meters high) glass and steel building in downtown Seattle, Washington was opened to the public on Sunday, May 23, 2004. The architects conceived the new Central Library building as a celebration of books, deciding after some research that despite the arrival of the 21st century and the “digital age,” people still respond to books printed on paper. The architects also worked to make the library inviting to the public, rather than stuffy, which they discovered was the popular perception of libraries as a whole.

Although the library is an unusual shape from the outside, the architects' philosophy was to let the building's required functions dictate what it should look like, rather than imposing a structure and making the functions conform to that.



Fig 4.7: Perspective, Source: Arch daily

Architects: **OMA + LMN**

Location: **Seattle, Washington, USA**

Key Personnel: **Rem Koolhaas and Joshua Prince-Ramus (Partner-in-Charge), with Mark von Hof-Zogrotzki, Natasha Sandmeier, Meghan Corwin, Bjørke Ingels, Carol Patterson**

Consultants: **Arup, Bruce Mau Design, Davis Langdon, Dewhurst Macfarlane, Front, HKA, Hoffman Construction, Inside/Outside, Jones & Jones, KuglerTillotson, Magnusson Klemencic, McGuire, Michael Yantis, Pielow Fair, Quinze& Milan, Seele**

Client: **Seattle Public Library**

Program: **Central library for Seattle's 28-branch library system, including 33,700 sqm of hq, reading room, book spiral, mixing chamber, meeting platform, living room, staff floor, children's collection, and auditorium, and 4,600 sqm of parking.**

Project year: **1999-2004**

Constructed Area: **38,300 sqm**

Budget: **US \$169.2 M**

Source: **Archdaily.com**

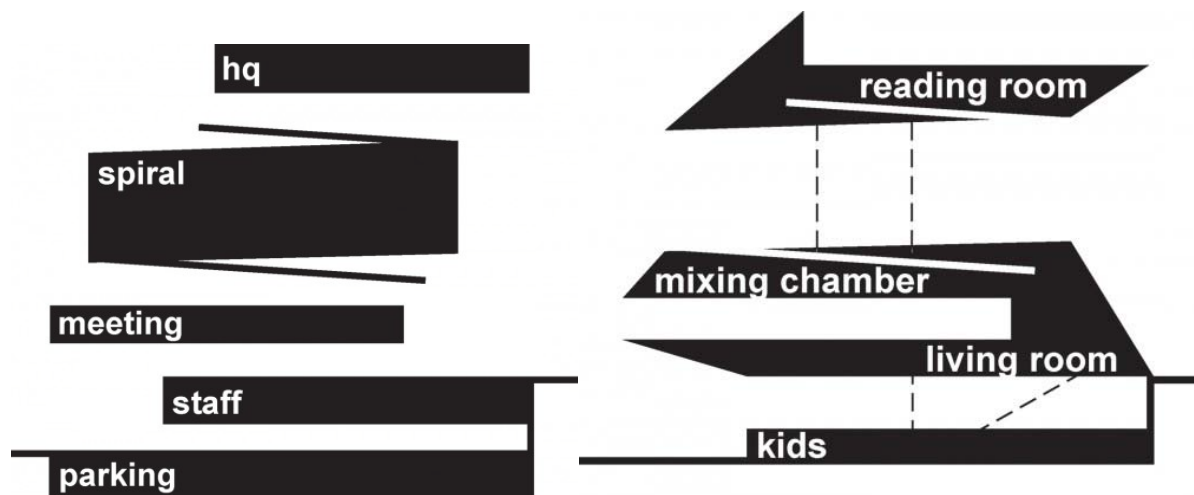


Fig 4.8: zoning, Source: Archydaily

Flexibility in contemporary libraries is conceived as the creation of generic floors on which almost any activity can occur. Programs are not separated, rooms or individual spaces not given unique characters. In practice, this means that bookcases define generous (though nondescript) reading areas on opening day, but, through the collection's relentless expansion, inevitably come to encroach on the public space. Ultimately, in this form of flexibility, the library strangles the very attractions that differentiate it from other information resources. Each platform is a programmatic cluster that is architecturally defined and equipped for maximum, dedicated performance. Because each platform is designed for a unique purpose, their size, flexibility, circulation, palette, structure, and MEP vary. The spaces in between the platforms function as trading floors where librarians inform and stimulate, where the interface between the different platforms is organized—spaces for work, interaction, and play.

Analysis

The Seattle Central Library has broken the traditional library norms. It introduced new programs in the library for example the “living room of the city.” The programs are blended and interlinked to provide a large volume of space. The quality of light and shadow according to the related functions is splendid.

4.2.5 Guggenheim Museum, New York

The **Solomon R. Guggenheim Museum** (often referred to as "The Guggenheim") is a well-known art museum located on the Upper East Side of Manhattan in New York City. It is the permanent home of a renowned and continuously expanding collection of Impressionist, Post-Impressionist, early Modern and contemporary art and also features special exhibitions throughout the year. The museum was established by the Solomon R. Guggenheim Foundation in 1939 as the Museum of Non-Objective Painting, under the guidance of its first director, the artist Hilla von Rebay. It adopted its current name after the death of its founder, Solomon R. Guggenheim, in 1952.

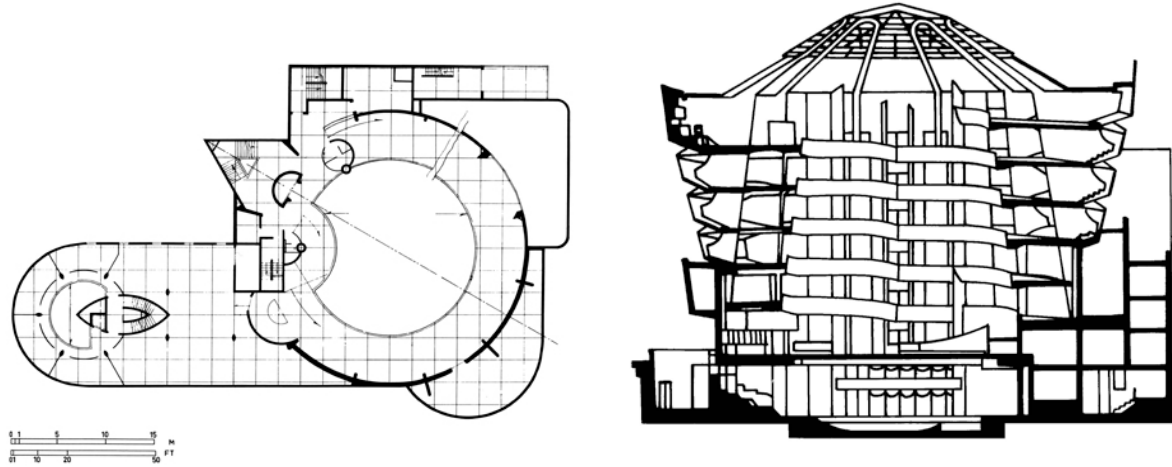


Fig 4.9: plan and section, Source: Wikipedia

Location: 1071 5th Avenue, New York, USA

Area: less than one acre

Built: 1959

Architect: Frank Lloyd Wright

Architectural Style: Modern Movement



Fig 4.10: perspective, Source: Wikipedia

Analysis

The Guggenheim Museum demonstrates the concept of hierarchy of space. The ramps around the open court are very interactive and playful. The central light creates a divine atmosphere inside the building. It is an open plan with the perfect flow of space.

Chapter 05

Program Development

5.1 Introduction

5.2 Rationale of the program

5.3 Events and Activities

5.4 Program development

5.5 Final Programs

5.1 Introduction

This chapter deals with developing understanding the requirements of the program and the functional spaces. As mentioned before there is no specific programmatic for this project, it is very important to have thorough understanding of how the programs derived and the space took shape. The program development of the Temple of Knowledge unlike most other projects had to evolve parallel with the design development in various phases.

5.2 Rationale of the program

The basic understanding of the programmatic requirements of the project could be gathered from the literature overview. There it is strongly established that for such a project to be successful it needs to facilitate creative and innovative areas and the programs needs to be questioned and modified to serve the current demands of the 21st century. The programs were thought of to be flexible in nature. This will ensure the facilities continual vibrant ambience and provide an opportunity of change and variety according to time.

As the site was quite large, the existing rules and regulations regarding the sit and functions were well under the limits. The functional extents and area requirements of the programs were derived from various local and international case studies, Time Saves Standards, The Architect's handbook. Then as the programs developed alongside the design, the central idea influenced different aspects of both program and design. Ultimately the functional areas were hugely influenced by the design and scale of the project.

5.3 Events and Activities

The space was thought of to be very busy and interactive. And thus events and activities have to run all throughout the year.

REGULAR ACTIVITIES

Exhibition

Workshop and conference

Drama

Documentary and Films

PERIODICAL ACTIVITIES

Science Fair

Debate

Art competition
 Design competition
 Book fare
 Concerts

5.4 Program Development

5.4.1 Phase I

- Place for knowledge and information
- Invitation to people in general
- Sharing and exchanging ideas and innovations
- Opportunities for collision of ideas to generate discussions and debates
- Place for entertainment
- Mainly three types of spaces civic, educational and sharing space

5.4.2 Phase II

Civic spaces

| | |
|--------------------------|------------|
| Indoor exhibition space | 17,000 sft |
| Multipurpose Space | 10,000 sft |
| Outdoor exhibition space | 25,000 sft |
| Food court (indoor) | 15,000 sft |
| Food court (outdoor) | 25,000 sft |
| Book market | 12,000 sft |
| Gaming zone | 5,000 sft |
| Observatory | 10,000 sft |

Educational spaces

| | |
|---|------------|
| Lobby including gallery, newspaper area | 20,000 sft |
| Back office and technical area | 10,000 sft |
| Common reading space | 30,000 sft |
| Group reading space | 10,000 sft |

| | |
|----------------------|------------|
| Self reading space | 10,000 sft |
| Multimedia zone | 8,000 sft |
| Seminar, Class rooms | 10,000 sft |
| Exhibition Space | 15,000 sft |
| Food court | 15,000 sft |
| Gallery | 5,000 sft |
| Archive | 70,000 sft |

Other spaces

Parking
 Circulation
 Amphitheatre
 Public and private wash rooms
 Store
 Information centers
 Kiosks for various displays
 Comment and graffiti walls
 Sculpture displays

5.5 Final Program

Civic spaces

| | |
|--------------------------|------------|
| Indoor exhibition space | |
| • Formal and enclosed | 10,000 sft |
| • Informal semi open | 7,000 sft |
| Multipurpose space | |
| • Hall | 10,000 sft |
| • Backstage | 2,000 sft |
| Outdoor exhibition space | 25,000 sft |
| Food court indoor | |
| • Sitting area | 10,000 sft |
| • kitchen | 3,000 sft |

| | |
|--------------------|------------|
| • store | 1,500 sft |
| • toilets | 500 sft |
| Food court outdoor | |
| • sitting | 20,000 sft |
| • reading area | 5,000 sft |
| Book market | |
| • stalls | 10,000 sft |
| • store | 2,000 sft |
| Gaming zone | 5,000 sft |
| Observatory | 10,000 sft |

Educational spaces

Lobby

| | |
|-------------------------|------------|
| • Librarian's office | 200 sq.ft |
| • Copy area | 100 sq.ft. |
| • Printing area | 200 sft |
| • Medical room | 500 sft |
| • Periodicals | 2,000 sft |
| • Cloak room | 500 sft |
| • Washrooms | 500 sft |
| • Waiting | 6,000 sft |
| • Newspaper area | 2,000 sft |
| • Prayer space | 1,000 sft |
| • Display area | 3,000 sft |
| • Circulation and green | 4,000 sft |
| Back office | |
| • Office space | 5,000 sft |
| • Technical area | 5,000 sft |
| Common reading space | 30,000 sft |
| Group reading space | 10,000 sft |
| Self reading space | 10,000 sft |
| Multimedia Zone | |
| • Work space | 5,000 sft |
| • Lobby | 1,000 sft |
| • Server | 1,000 sft |
| • Store | 1,000 sft |

| | |
|----------------------|------------|
| Seminar, Class rooms | 10,000 sft |
| Exhibition Space | |
| • Exhibits | 10,000 sft |
| • Office | 1,000 sft |
| • Store | 4,000 sft |
| Food court | |
| • Stalls | 5,000 sft |
| • Sitting | 10,000 sft |
| Gallery | 5,000 sft |
| Archive | 70,000 sft |

Total sft: 3,22,000sft

Outdoor spaces

Parking 35,000 sft
 Plaza and paved open gathering spaces
 Outdoor exhibition spaces
 Open green field
 Water body
 Amphitheatre
 Kiosks for various displays and sale
 Space for vendors, hawkers
 Comment and graffiti walls
 Sculpture displays

Chapter 06

Design Development

6.1 Introduction

6.2 Development Phase

6.3 Final Design

6.4 Model photos

6.5 Rendered images

6.1 Introduction

The development process of the project is very important as the process is what transformed the intangible concept into a rational built form. The design development can be divided into two segments; conceptual and physical development. In this chapter the overall approach to the design solution would be portrayed through development sketches, diagrams, models and drawings.

6.2 Development Phases

6.2.1 Phase I

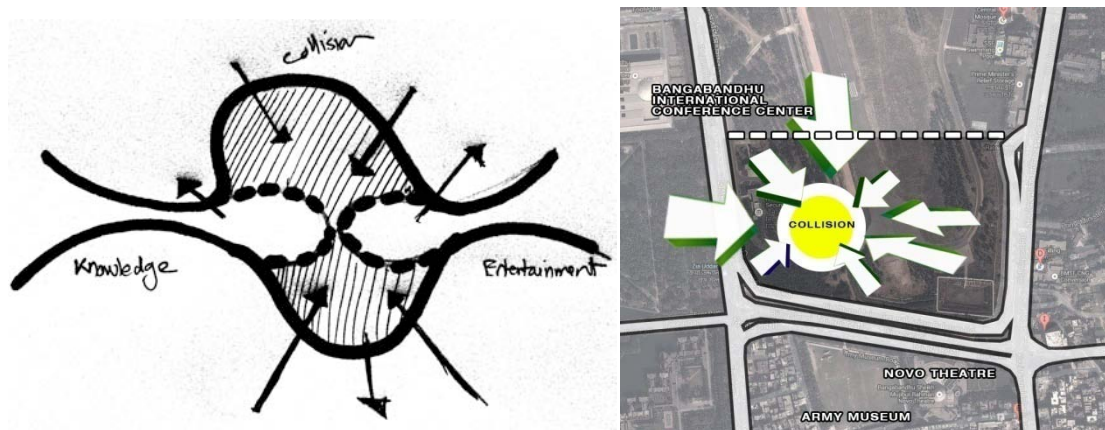


Fig 6.1: Phase 1, Source Author

Initially the idea was thought of to create a collision between spaces. And through this various functions and their configurations were analyzed to understand the zoning and private public relations. Firstly the entire concept of the library was questioned.

6.2.1.1 Project Abstraction

Libraries in the 21st Century should present themselves to the public in different way and with innovative programs: whether as life-long learning centres, as cultural market-places, as settings for new kinds of aspirational lifestyles, as agencies of public information and welfare rights, or as community facilities and meeting places. Contemporary library design will need to reflect the priority services and ethos being offered in that library for its particular set of users.

With the advancement of technology the relationship between the learning centre and the civic society is changing. As more learning catalogues go online, enabling people to order, reserve or renew stocks from home. And thus the interaction and meeting of people is decreasing as time flies by. And this also creates a division among the society as only a few number of people are associated with advanced technology if we think of Dhaka city as a whole. Moreover library itself creates a division between people as it mostly welcomes learned or educated people. It mainly works as a extension for other educational institutes. **Temple of knowledge** seeks to uplift the society through a positive change and that is education. To uplift the society the project had to address all sorts of people, rich, poor, people from all professions and even people of all age groups. Thus a typical library wouldn't be enough. As a result the library is being de-institutionalized, and becoming more like a club or leisure centre.

6.2.1.2 Concept development diagrams

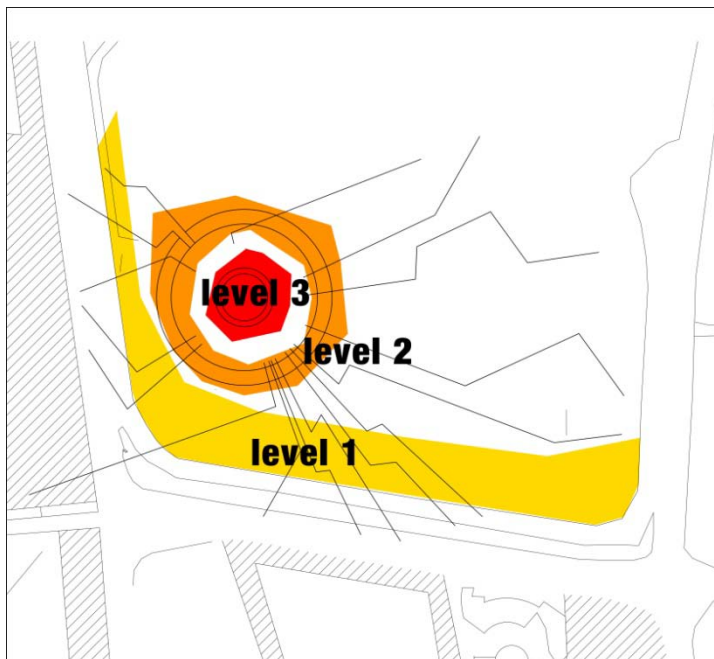


Fig 6.2: Conceptual Zoning, Source: Author

This diagram describes the initial idea of spreading knowledge throughout the society. As described earlier in chapter 3 that knowledge can be attained in different ways and most importantly it varied for person to person. Thus the project was divided into three major levels hoping to address a wider range of people. And most importantly the levels dispersed horizontally. This diagram also analyzes the layering of different spaces in the facility. The layering of spaces allows different sort of activities to take place as well as to create layers of public to private spaces.

Level 1 was dedicated entirely as a public space. In this level the public will be presented with a lot of options and opportunities. The main intention of this level was to present the people with a lot of basic required information to raise awareness.

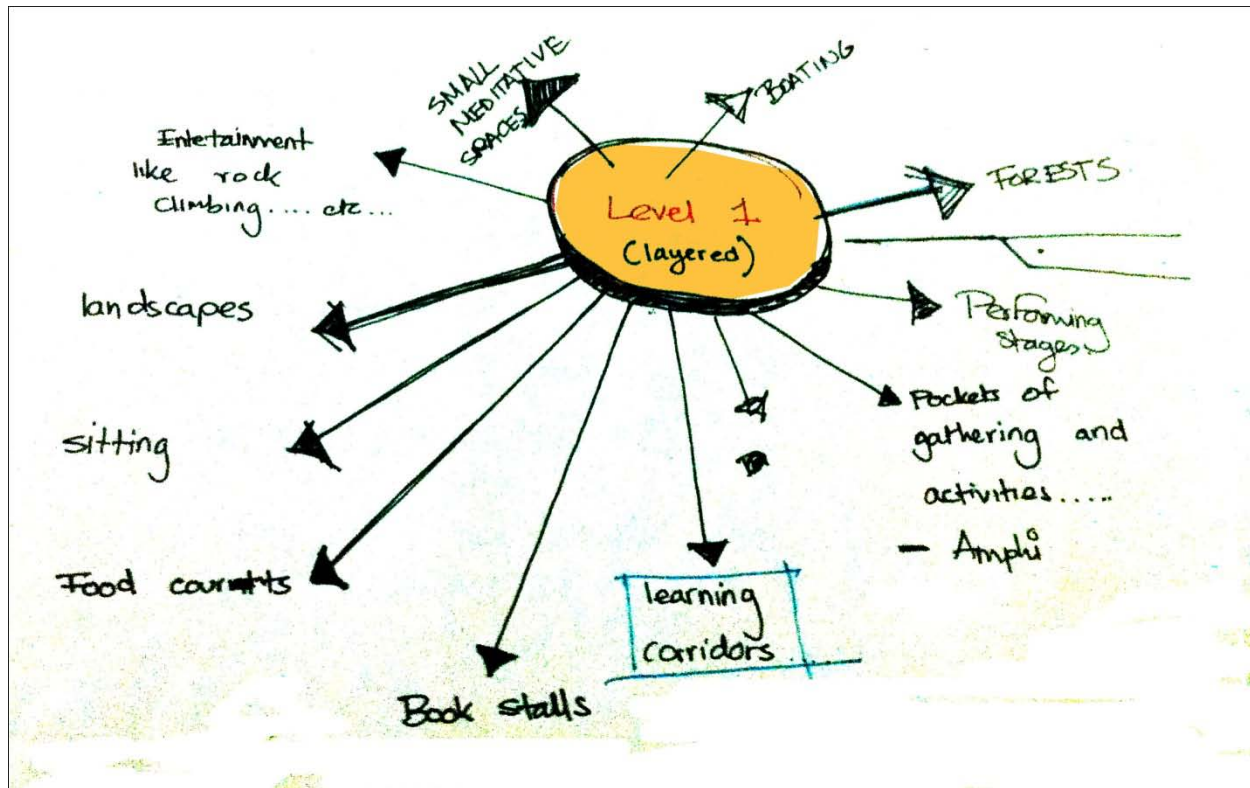


Fig 6.3: level 1 bubble diagram, Source: Author

The above diagram actually tells the true nature of the level. The idea was to make this level very subtle and sensitive. This space was thought of to be a juxtaposition of learning and entertainment. This would provide learning through visuals and experience.

Level 2 was thought of as the transition level. The space acted as a link between the formal and the informal level. This space has acted as a support to both the other levels.

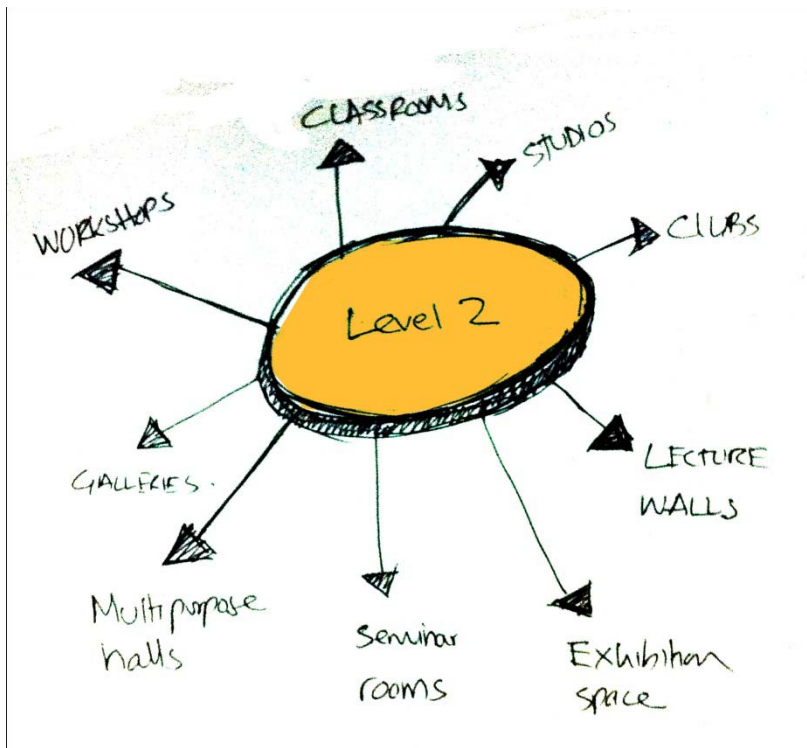


Fig 6.4: level 2 bubble diagram, Source: Author

Level 3 is the typical library. It is the formal space in the project. It will act as a resource for the entire project.

The levels were divided according to people demands and attraction. All the levels had education combined with it but in different manner within the given space. The idea of spreading knowledge was thought about through the five sense: touch, sight, hear, smell and taste.

The levels were linked by learning corridors. Knowledge was divided according to subjects, eighteen major divisions to be exact. And this is where the learning corridors were derived. 18 learning corridors with abstract names linked all the different levels. The learning corridors was thought of the datum that linked the project together.

6.2.2 Phase II

This phase deals with conceptual layering of spaces and integrating the functions, then exploring ideas of forms for such a facility. This phase also dealt with the relationship of the project with the site and its surroundings.

6.2.2.1 Concept Development Diagrams



Fig 6.5: concept diagram, Source: Author

A tree was thought of the main concept of the project. This is because a tree can act as the perfect symbol and can be related to knowledge. The first basic type of education in our country started under a tree and thus the place from where knowledge spread. The roots could act as the learning corridors and the tree structure could support all the facilities and levels.

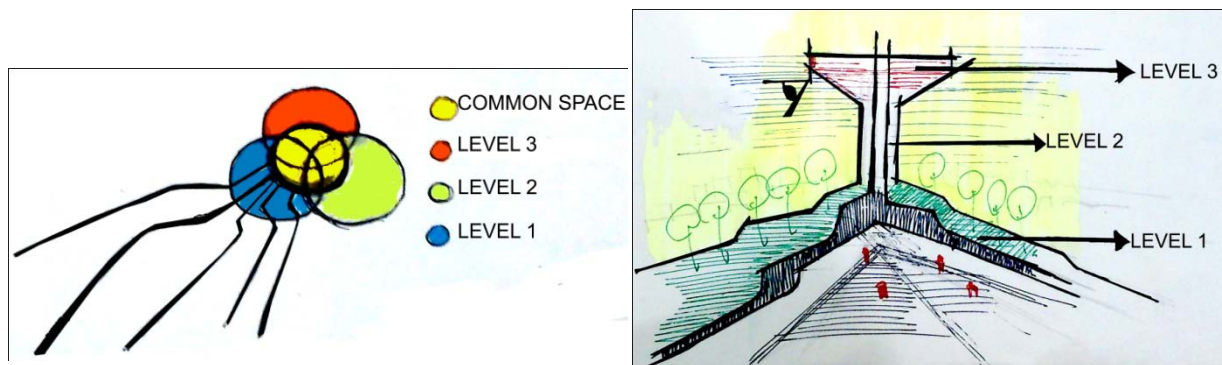


Fig 6.6: concept diagram 2, Source: Author

In this phase the zoning of the levels were reconsidered and thought of again. The problem with the horizontal zoning was that it created further segregation and the filtration started very early. The zones were also not defined. In this phase the idea of a common space came about. And the levels were stacked in relation with the open space.

6.2.2.2 Approaching Site



Fig 6.7: urban courtyard, Source: Author

The site was thought of to create an urban court. The site was gradually sloped to create an inviting space for the civic. The idea was to create a learning environment within the busy city. The sloped entry leading to the urban court allowed to create a meditative space and also cut down the amount of noise reaching the project. The project had to blend into the lifestyles of the people and to achieve that the entire site had to be inviting and it had to blend with the urban fabric. Thus the introduction of the urban court can only act as a positive space of attraction and learning. The learning corridors were now thought of as the entry to the main functions and the urban court would act as the common space from where filtration would start to reach the different levels.

6.2.2.3 Ideas of Form

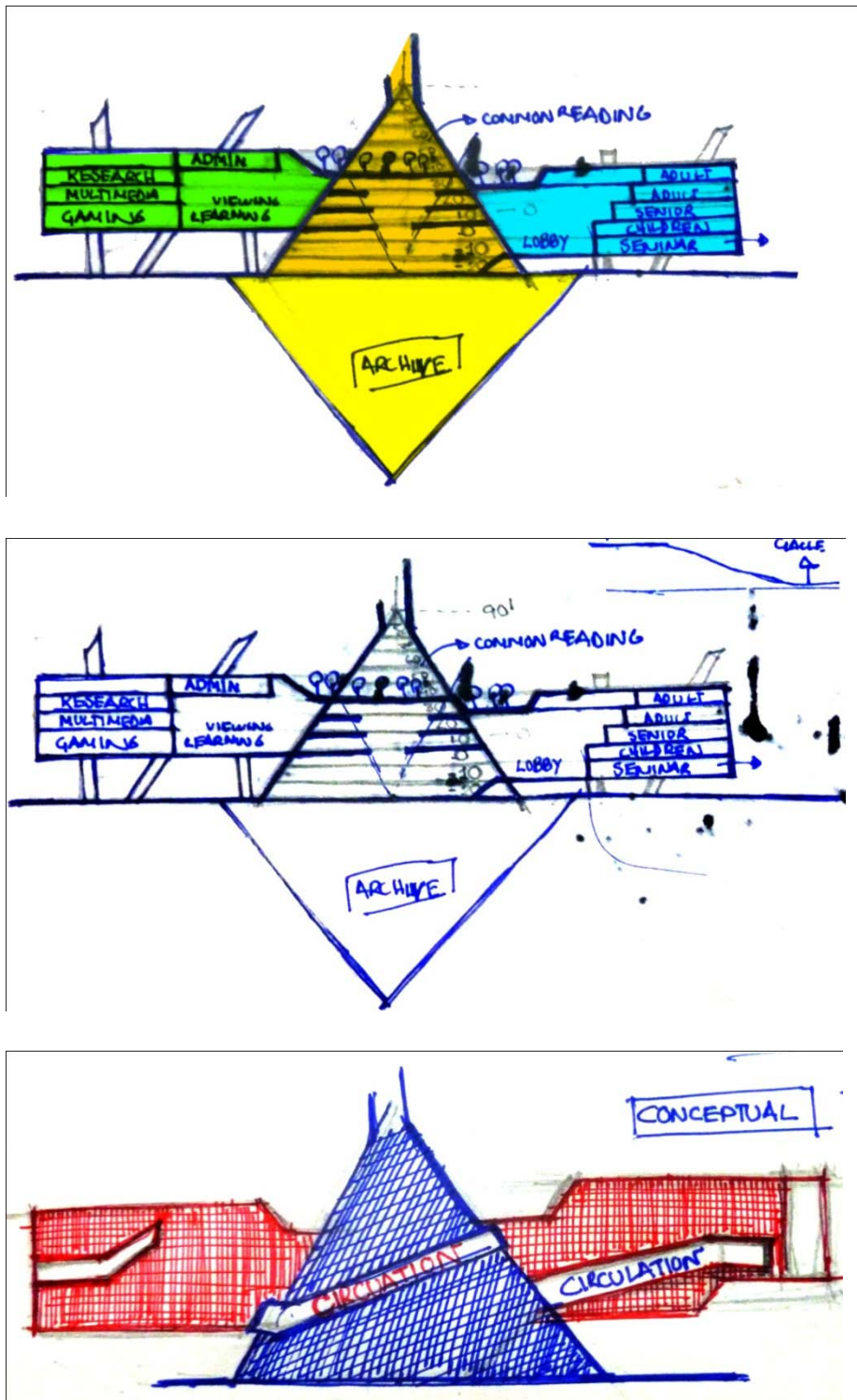


Fig 6.8: Ideas of form

6.2.3 Phase III

This phase enters into the mainstream design. This phase deals with the blending of the masterplan with the surrounding urban fabric and connect all the existing civic spaces with the Temple Of Knowledge.

6.2.3.1 Integrating the Project

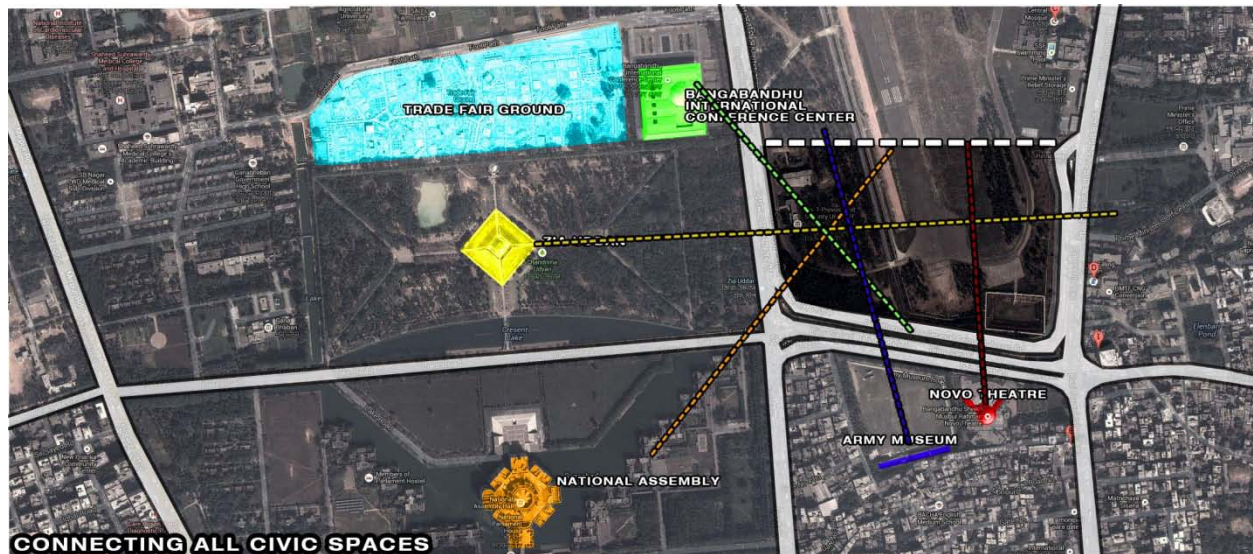


Fig 6.9: connecting all civic spaces, Source Author

The placement of the project was vital. Axis's were taken from all the surrounding civic spaces and the project was placed in an tentative intersection addressing all the surrounding structures.

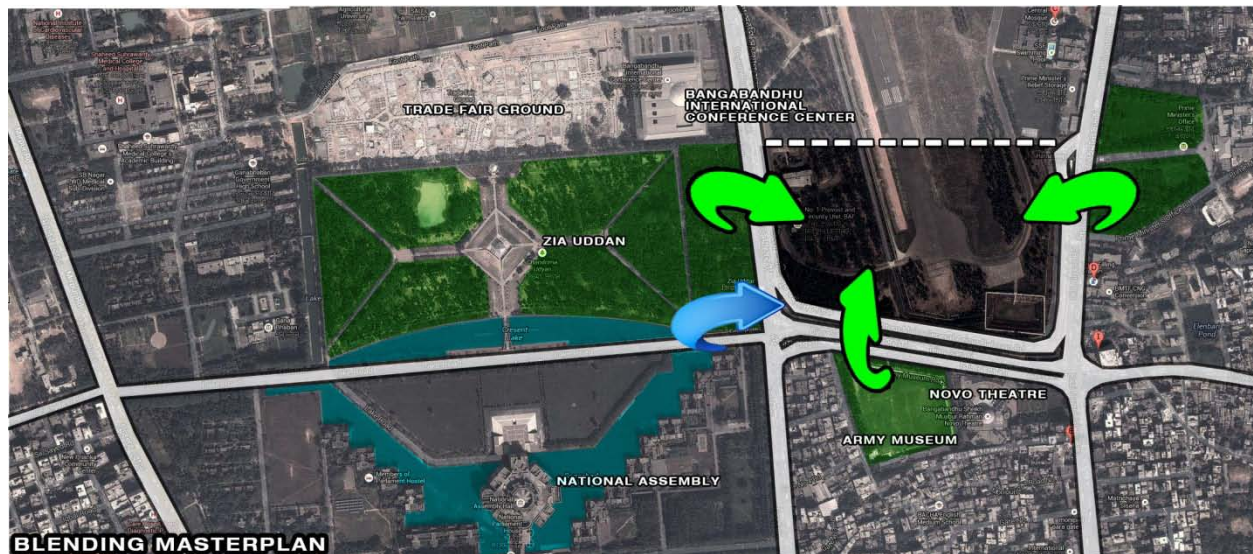


Fig 6.10: blending masterplan, Source Author

The next step was to blend the new masterplan with the surrounding urban fabric. Elements from nature was used as an important tool to combine and unite all the civic spaces. As described earlier that the main intention of the project was to blend into the society. And thus the project was thought of to be an extension for all the civic spaces thus connecting them. The blending of nature would integrate all the surrounding civic spaces visually and thus creating a large volume of event corridor. Through the phases it became clear that it was very difficult to define knowledge as knowledge has no boundaries and definition. Knowledge can be acquired through anything and everything. Respecting this idea connecting all the surrounding civic spaces became a greater challenge. The spaces demanded to be linked in a way that a person could move from one space to the other without crossing any barriers and controls.



Fig 6.11: linking all civic spaces, Source Author

This above diagram explains that the pedestrian movement wasn't interrupted by the placement of the project. And the project work as a shortcut to reach the other civic spaces. The project even connected the three major road presenting it with a common plaza. To use the shortcut the people had to cross through the most important space of the project. This is called the sharing

space. The sharing space acts as the common space and it links all the levels together. And the sharing space was placed outside the controlled area because through the phases it became clearer that knowledge is all about sharing.



Fig 6.12: masterplan zoning, Source Author

This diagram shows the pedestrian and vehicular movement of the project. The idea was to make the structure accessible from all sides. The accesses were bounded and linked together by green and water.

Exploring various forms created an understanding of how to integrate the site and surroundings with the facility. But most importantly it shows what sort of formal expression to develop or not. It is very clear that any form that would create an idea of its own to the people would not be suitable. The form or accumulation of various forms need to be juxtaposed in such a way as to create transparency of the process, attract people and make them participate to and experience the facility in various ways. The form also needs to correspond to the scale of the project considering the wider urban dimensions.

6.2.3.2 Ideas of Form

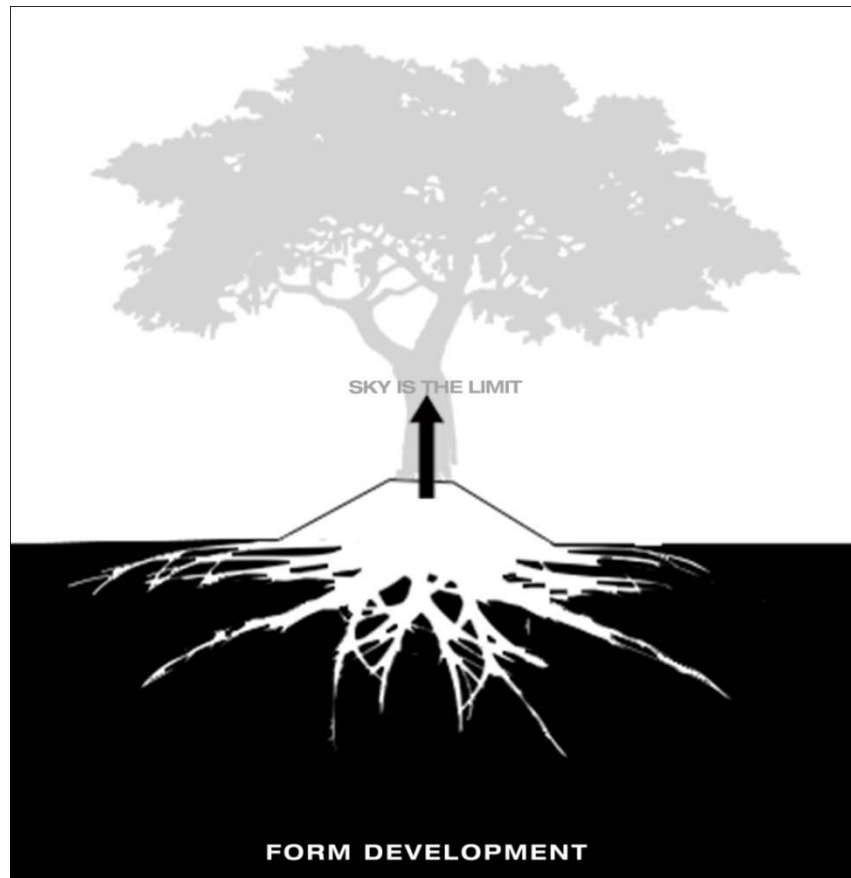


Fig 6.13: form development1, Source Author

The idea of a tree and the form developed as the concept of knowledge became clearer. The idea was to cut the trunk and merge it with the sky. Knowledge has no boundaries: thus the form showing a connection with the sky to show that sky is the limit.

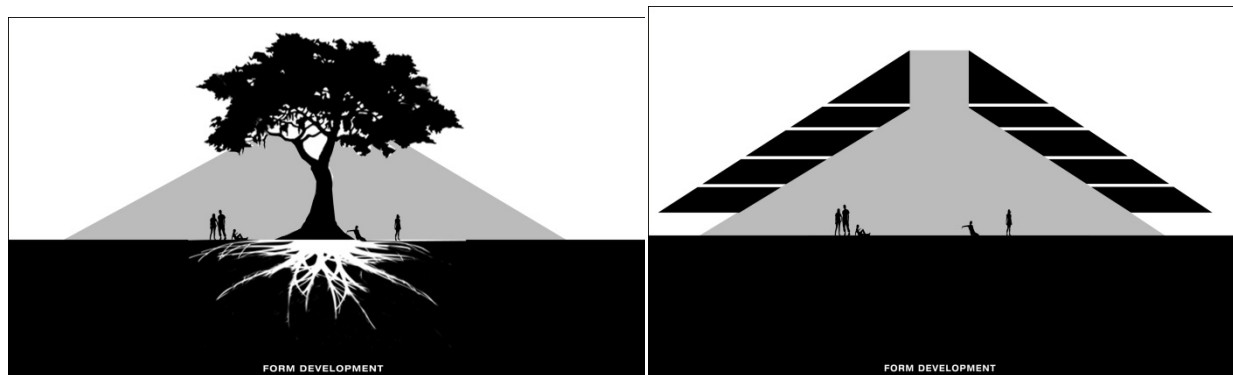


Fig 6.14: form development 2, Source Author

Tree provides us with shade and comfort. To develop and abstract the form the shade that the tree provides forms the void in the project and the functions are shacked around the void.

The central void generated by the vertical stacking was designed not to be an atrium but a gateway to enlightenment. This void flows out through intermediate common spaces. All these voids merge together to form a singular flowing space & also break down the scale of the building.

6.2.4 Phase IV

Phase IV deals with the transformation of the intangible idea into a physical form.

6.2.4.1 Internal Layouts

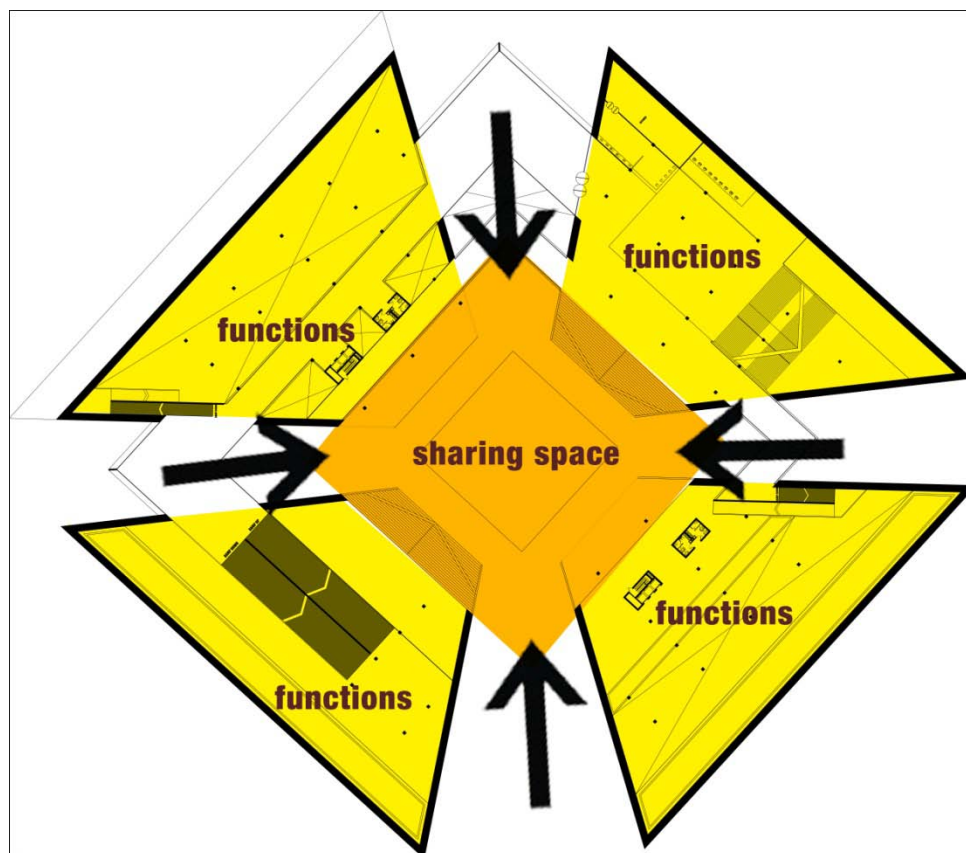


Fig 6.15: internal layout, Source Author

The internal layout of the plan was created in respect with the central void the sharing space. All the functions were placed around the central court. The edges of the form were subtracted to create an inviting entry to the project from all sides. The internal layouts are the most critical design decision that was to be taken as the workspaces are to remain most flexible due to its undefined use. The project had no interior walls to make it a unified volume of space. The interior was portioned using book shelves and change of levels. Thus the flow of space remained continuous and all the spaces were visually connected in one large volume. The large unified volume of space was broken down through a hierarchy of interior spaces. The pockets of meeting spaces were merged sensitively with the large public void. All the functions were connected in space and visually with the central void. The central void being at outdoor helped to link the interior with the exterior.

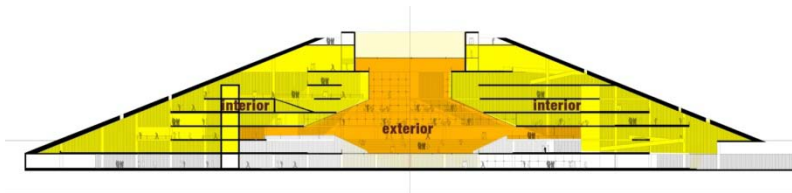


Fig 6.16: sectional, Source Author

This diagram shows how the interior and exterior is merged to form one common space. The spaces overlap creating a play between the two spaces.

6.2.4.2 Fenestration

The idea of the fenestration came again in the relationship of the tree. The structure was an abstract form of space under a tree. The fenestration was mainly related to the lighting under a tree. The diffused sparks of light was the main idea for the fenestration to develop.



Fig 6.17: elevation idea, Source Author

6.2.4.3 The Central void

The main intention of the project was to uplift the society with a positive change and that is through knowledge and enlightenment. To achieve this many things were tried as seen through all the phases of design development. And lastly the central void came into being. Every project demands a soul that makes the project a success and in the case of Temple of Knowledge it is the central void that creates the soul. This space is thought of the sharing space. Knowledge can be attained through sharing. And as more people visit this space the more sharing of knowledge there will be. The central void doesn't only act as the atrium but a gateway to enlightenment. And this is the space where knowledge is celebrated. This space needed to have a changing character so that people always had something to learn. To achieve that I took the help of light and the people themselves. There is no need to define what natural light is, but we do need to remember that this light allows us to define what is around us, by day and night: the changing perception of the things or the bodies on which it impacts, and the space that contains them. Light, or absence of light, can also transform this space in each season, each day of the year, each hour of the day, each moment.

Le Corbousier went as far as saying that “architecture is the wise, correct and magnificent play of volumes collected together under the light”. This philosophy binds The Temple of Knowledge together. The entire project is characterized around this space. The central void connects the past with the present with the help of light which acts as an invisible datum.

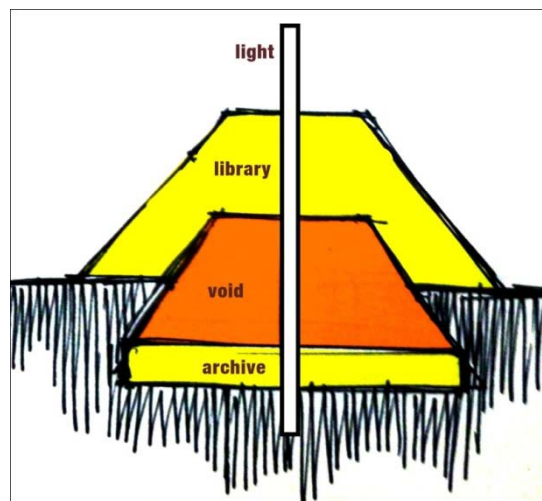


Fig 6.18: connecting spaces, Source Author

6.2.4.4 Inspiration behind the central void



Fig 6.19: void inspirations, Source Author

6.2.4.5 Multipurpose use of the central void



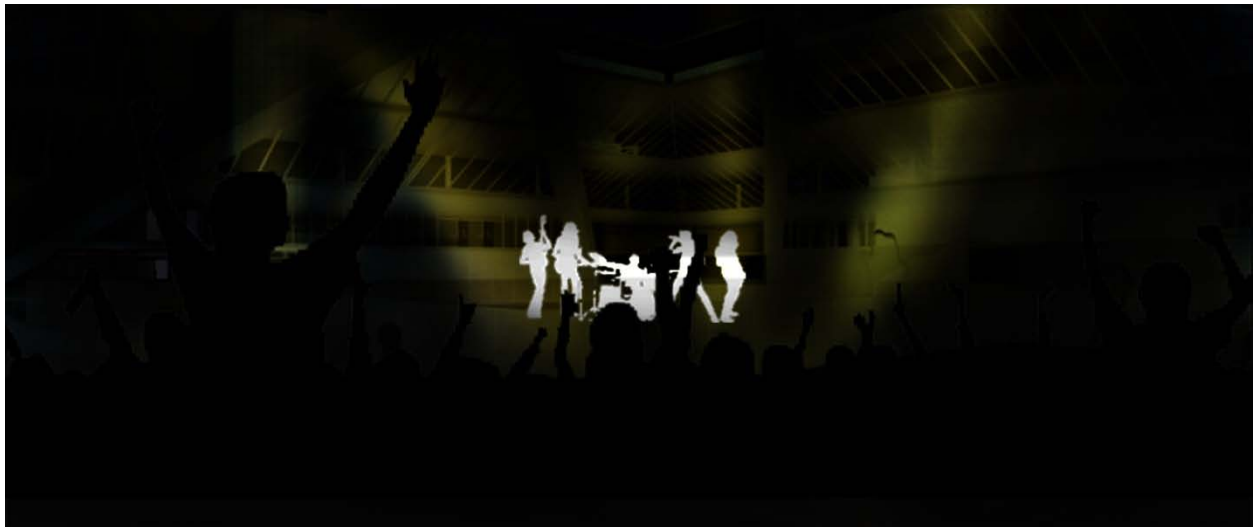


Fig 6.20: use of the void, Source Author

6.3 Final Design

Plans

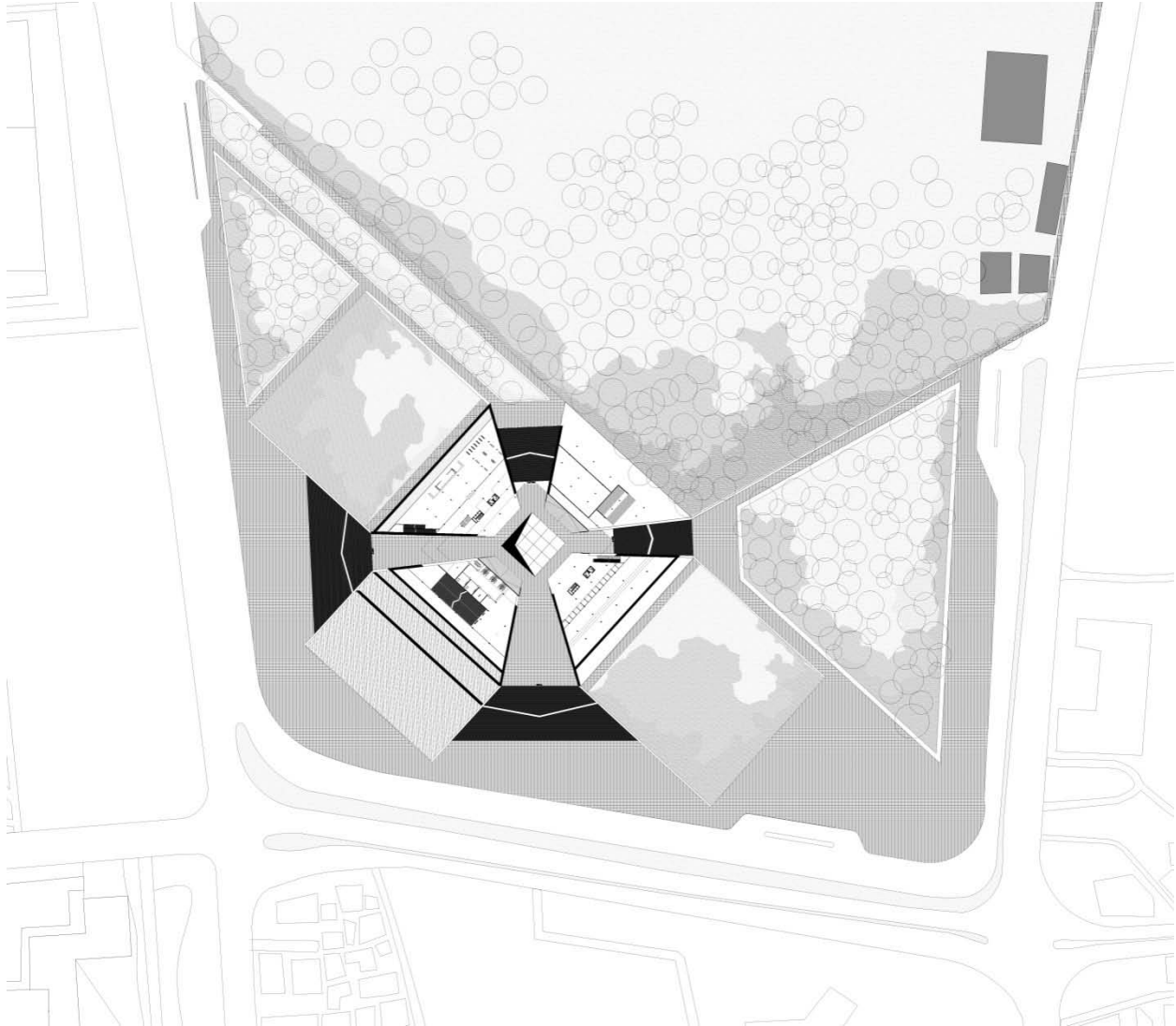


Fig 6.21: Master plan, Source Author

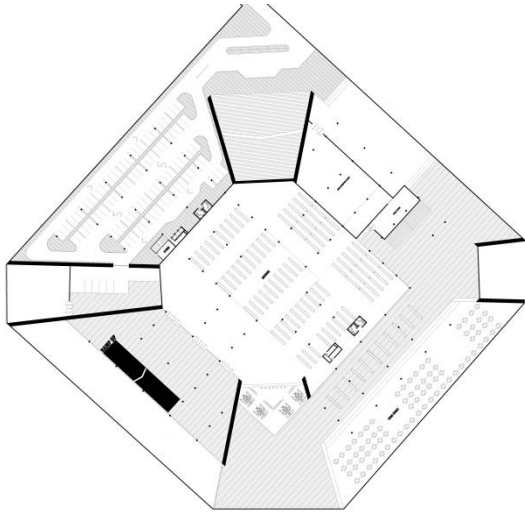


Fig 6.22: plan at -20 ft, Source Author

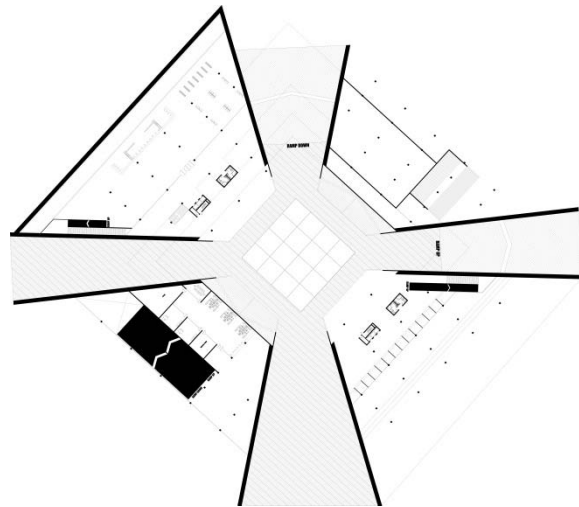


Fig 6.23: plan at -10 ft, Source Author

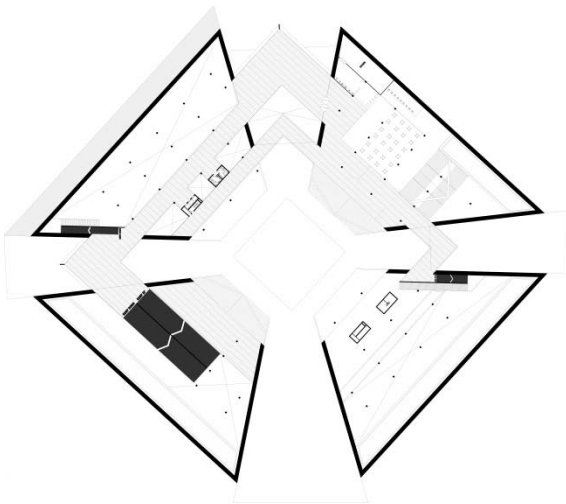


Fig 6.24: plan at 0ft, Source Author

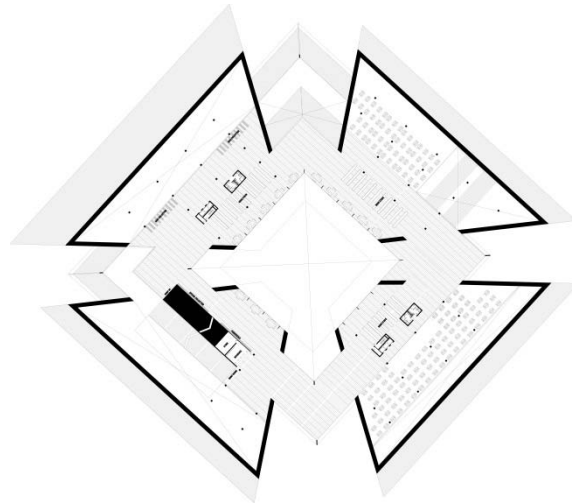


Fig 6.25: plan at 10 ft, Source Author

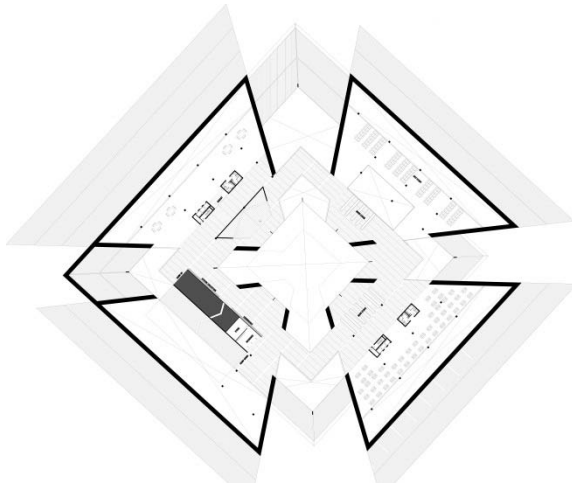


Fig 6.26: plan at 20ft, Source Author

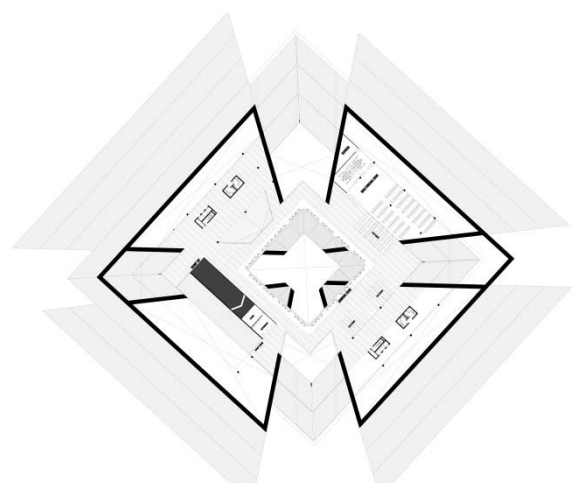


Fig 6.27: plan at 30ft, Source Author

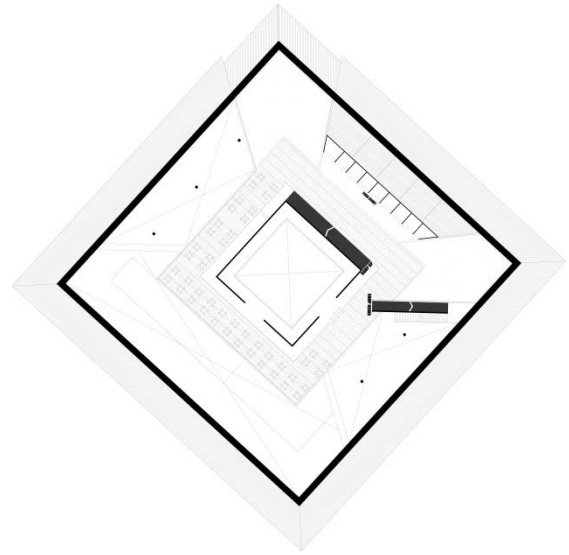
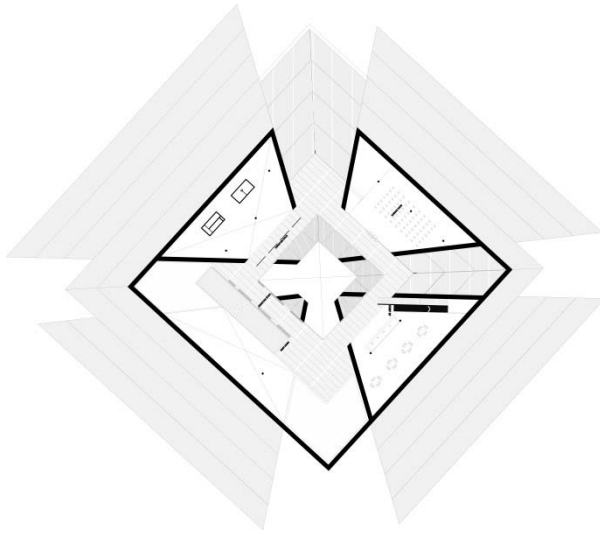


Fig 6.28: plan at 40ft, Source Author Fig 6.29: plan at 50 ft, Source Author

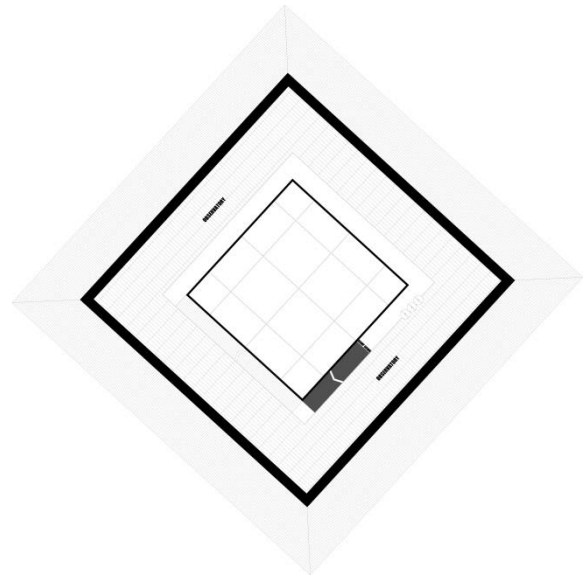
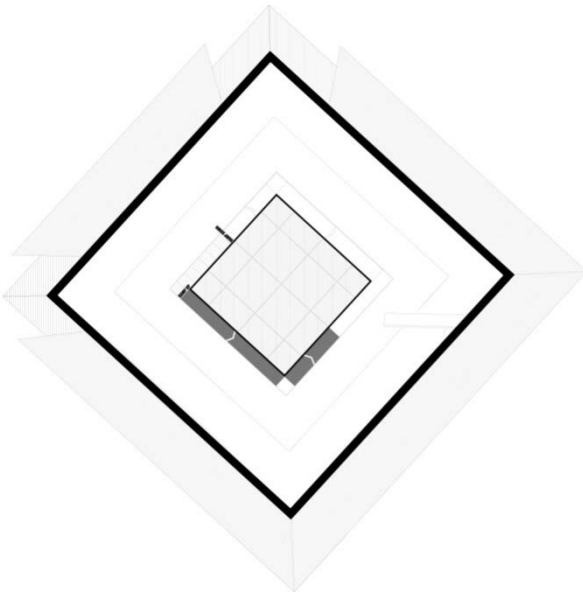


Fig 6.30: plan at 60ft, Source Author

Fig 6.31: plan at 70 ft, Source Author

Sections

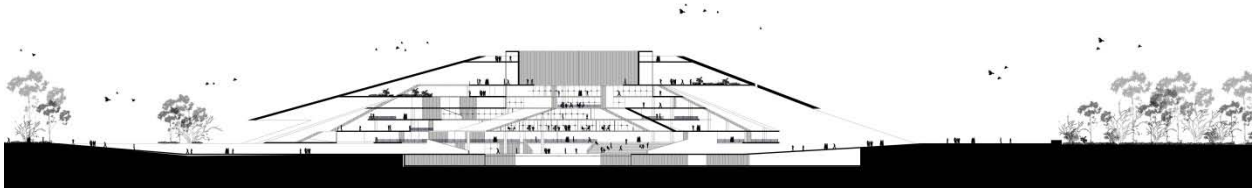


Fig 6.32: Section AA, Source Author

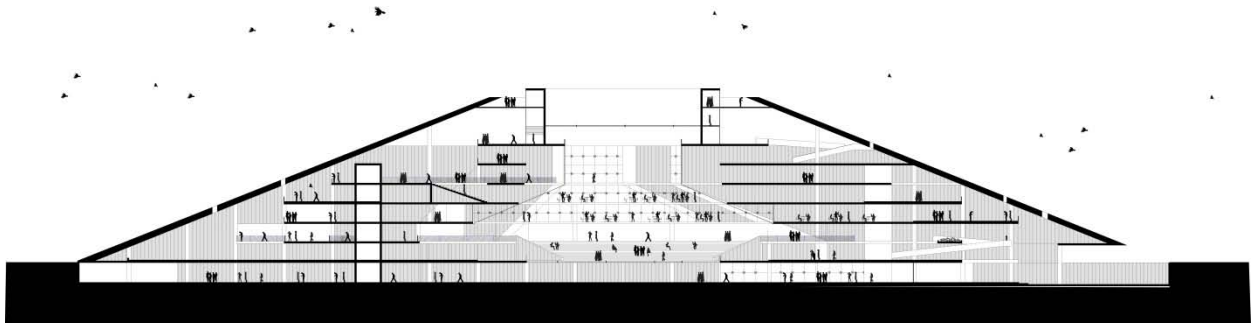


Fig 6.33: Section BB, Source Author

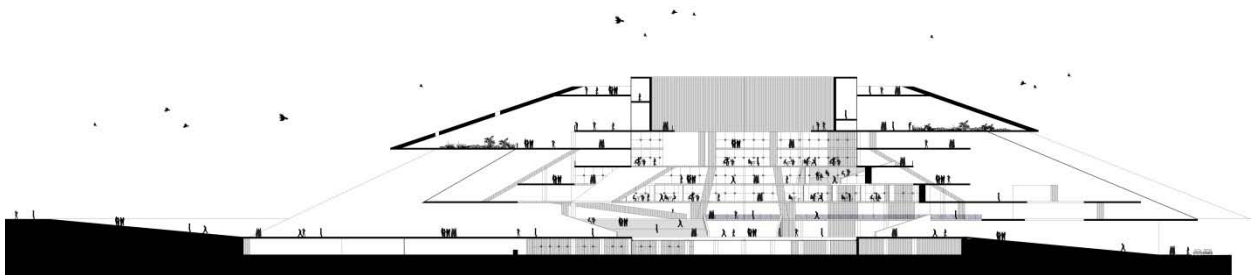


Fig 6.34: Section CC

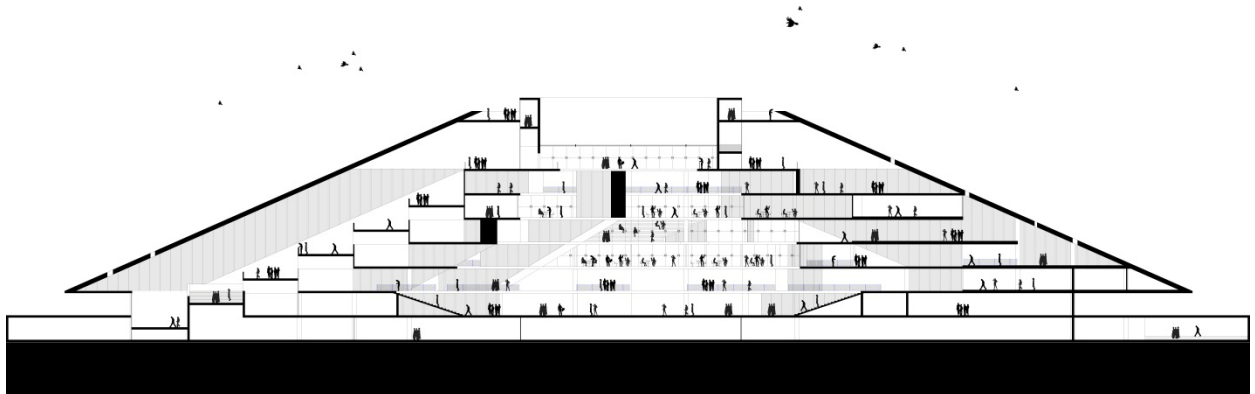


Fig 6.34: Section DD

Elevations

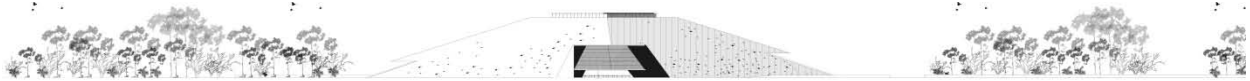


Fig 6.35: South Elevation

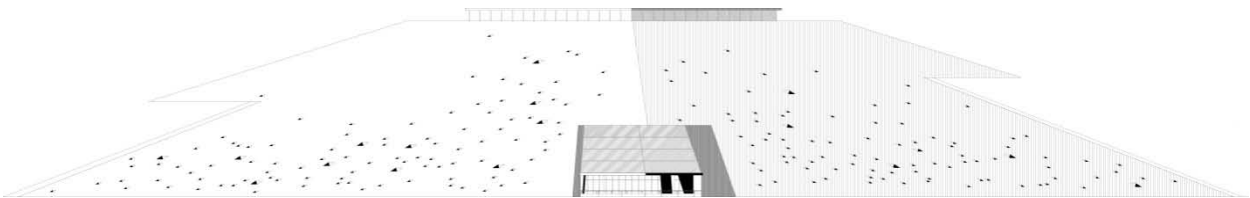


Fig 6.36: East Elevation

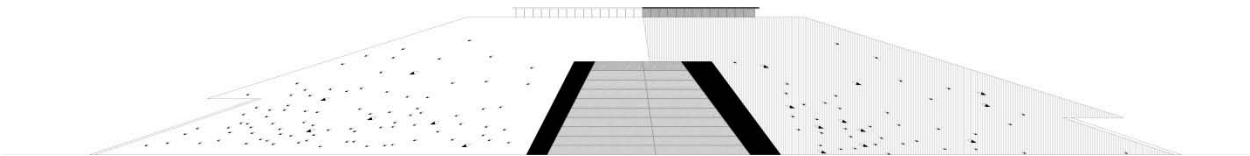


Fig 6.37: North Elevation

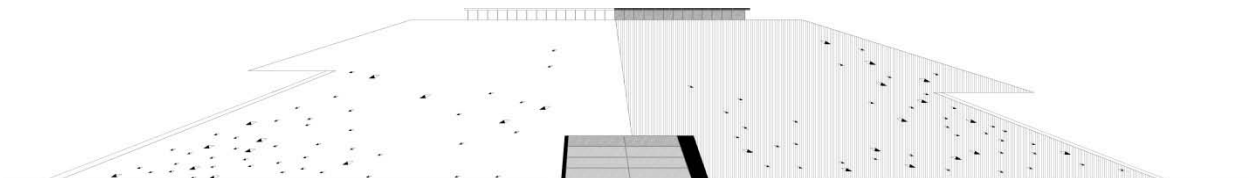
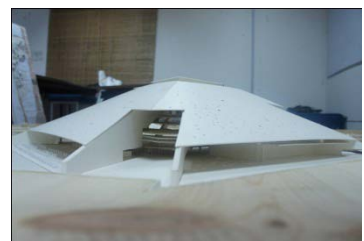
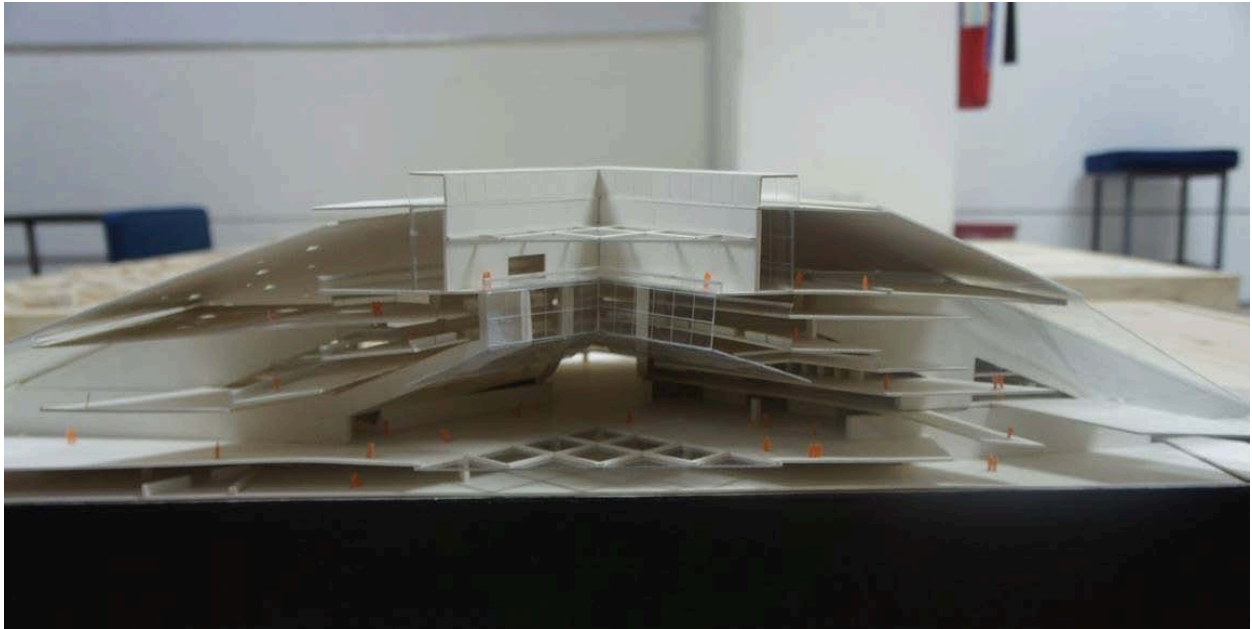
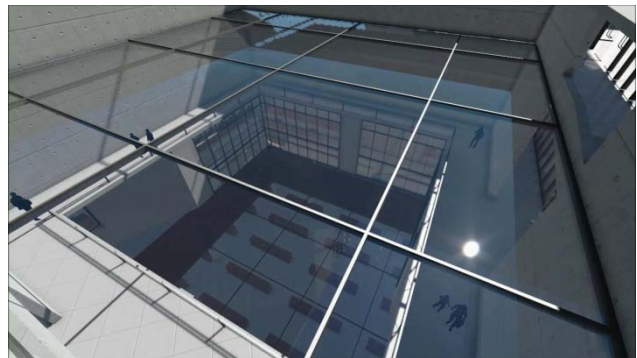
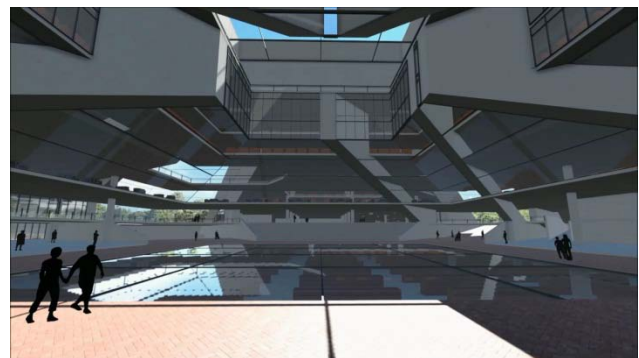
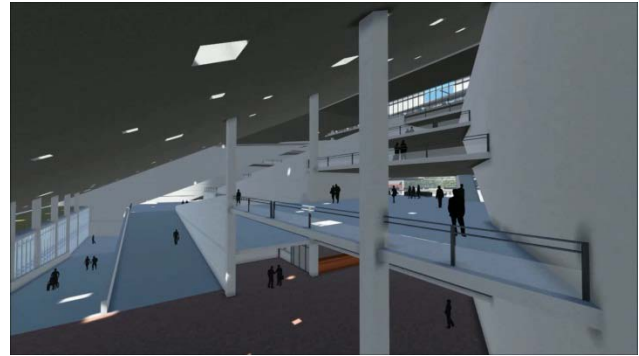


Fig 6.38: West Elevation

6.4 Model Photos



6.5 Rendered Images



6.6 Conclusion

The Temple of Knowledge is an ideacentric project. The overarching objective of the project is to create positive social change by bringing together and facilitate people through enlightenment. The scale of the project allows it to create an impact at the urban level and become a potential learning hub. This hub would then inspire and influence various other such facilities or hubs of different scales to generate throughout the city. Apparently simple in functionalities, but its creative juxtaposing of various fields enables it to act as an antidote continuously injected in the society, fighting against social prejudice, fundamentalism, moral decay and other such stigma.

Reference

<http://en.wikipedia.org/wiki/Navaratna>

[http://en.wikipedia.org/wiki/TED_\(conference\)](http://en.wikipedia.org/wiki/TED_(conference))

<http://en.wikipedia.org/wiki/Google>

http://en.wikipedia.org/wiki/List_of_Google_products

<http://www.google.com>

www.ted.com

www.actiongalleries.com

www.londondrawing.com

www.muzharulislam.com

www.greatbuildings.com

Mowla, Q. A, Memory association in place making: understanding an urban space

www.kmt.com

[www. Archdaily.com](http://www.Archdaily.com)

[www. Archspace.com](http://www.Archspace.com)